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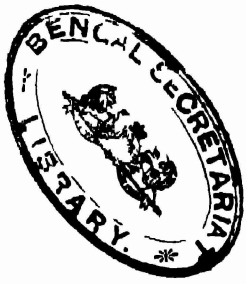
114



N.-W. P. AND OUDH.

FOREST DEPARTMENT.

ANNUAL PROGRESS REPORT OF ADMINISTRATION,

FOR THE YEAR ENDING 31ST MARCH 1890.

ERRATA.

Corrections necessary in Central Circle Annual Report for 1889-90.

				Rs.		Rs.
Page 19, in first statement, last line	...	...	4th column	1,43,039	should be	1,46,207
Ditto	...	...	6th ditto	2,56,752	ditto	2,59,920
Ditto	...	...	7th ditto	3,36,191	ditto	3,33,023
Ditto	...	...	9th ditto	81	ditto	82
Ditto	...	...	11th ditto	145	ditto	146
Ditto	...	...	12th ditto	190	ditto	189
Ditto	...	...	13th ditto	24	ditto	25
Ditto	...	...	15th ditto	43	ditto	44
Page 19, in second statement, against Jhánsi	...	...	4th ditto	5,308	ditto	8,476
Ditto	...	...	6th ditto	2,371	ditto	omitted.
Ditto	...	...	8th enter Rs. 797			
Ditto	...	...	10th ditto	69·12	ditto	110·38
Ditto	...	...	13th ditto	+946	ditto	+4,114
Ditto	...	...	14th ditto	−756	ditto	−3,024
Ditto Total	...	...	4th ditto	2,56,752	ditto	2,59,920
Ditto	...	...	6th ditto	3,59,487	ditto	3,57,116
Ditto	...	...	8th ditto	23,296	ditto	24,093
Ditto	...	...	10th ditto	43·30	ditto	43·83
Ditto	...	...	13th ditto	+2,352	ditto	−5,520
Ditto	...	...	14th ditto	+57,758	ditto	+54,590
Page 20, in first statement, against Head III—Formation, &c.	...	...	7th ditto	1,15,247	ditto	1,18,415
Ditto	...	...	9th ditto	2,023	ditto	5,191
Ditto Total	...	...	7th ditto	2,56,752	ditto	2,59,920
Ditto	...	...	9th ditto	3,099	ditto	6,267
Page 21, in first statement, against 1889-90	...	...	9th ditto	30,599	ditto	33,767
Ditto	...	...	11th ditto	1,43,039	ditto	1,46,207
Ditto { more	...	...	9th ditto	4,528	ditto	7,696
Ditto { less	...	...	11th ditto	4,581	ditto	7,749
Page 22, 3rd line	...	...		3,36,191	ditto	3,33,023
Page 22, 6th line (Total) ... ,	...	...		3,60,909	ditto	3,57,741

Page 55—Form No. 58.	Under Jhánsi, against A.VIII.C. enter	...	...							3,168
Ditto	Total ditto	...	1,786	2	8	should be	4,954	2	8	
Ditto	Jhánsi, against Total	...	3,792	4	2	ditto	6,960	4	2	
Ditto	column Total, against Total A.	...	1,43,038	10	7	ditto	1,46,206	10	7	
Page 56—Form No. 58.	Under Jhánsi, against Total A.	...	3,792	4	2	ditto	6,960	4	2	
Ditto	Column Total A. ditto	...	1,43,038	10	7	ditto	1,46,206	10	7	
Ditto	Jhánsi against Grand Total	...	5,308	3	2	ditto	8,476	3	2	
Ditto	Column Total ditto	...	2,56,752	0	10	ditto	2,59,920	0	10	
Page 57—Form No. 59.	Dr. side, Civil Department, Survey of India ...	...	250	12	0	ditto	3,418	12	0	
Ditto	Total against Inter-Departmental transfers	...	1,556	12	0	ditto	4,724	12	0	
Ditto	Total	...	9,20,071	10	6	ditto	9,23,839	10	6	
Ditto	Cr. side. By Expenditure as per annual summary Form No. 58,		2,56,752	0	10	ditto	2,59,920	0	10	
Ditto	Cr. side—Total ...	...	9,20,071	10	6	ditto	9,23,839	10	6	
Page 59—Form No. 62, against Jhánsi, 6th column		...		2,902		ditto		6,070		
Ditto	8th column ...	...		5,708		ditto		8,876		
Ditto	against Total, 6th column	...		1,15,247		ditto		1,18,415		
Ditto	ditto, 8th column	...		2,56,752		ditto		2,59,920		

In Local Government Review.

			Rs.		Rs.
Para. 6, 1889-90			1,786	should be	4,954
Para. 15,	Central Circle—Percentage on gross expenditure of the year,		20·4	ditto	20·17
Para. 21,	Central Circle Expenditure, 1889-90		2,56,752	ditto	2,59,920
Para. 21,	Grand Total of three circles		9,59,983	ditto	9,63,151
Para 21,	Surplus, 1889-90		3,36,191	ditto	3,33,023
Para, 21,	Grand Total		7,54,176	ditto	7,51,008

				Rs.		Rs.
Para 21—2nd statement, 1889-90—Formation, Protection, and Improvements ...	...	...	...	1,15,247	should be	1,18,415
Ditto.—	Net surplus	...	. .	3,36,191	ditto	3,33,023
Ditto.—	Grand total	...	...	2,93,692	ditto	2,90,860
Ditto.—	Surplus ...	...	...	7,54,176	ditto	7,51,008
Page 13—2nd table, 1889-90—	Central Circle, column 8	...	...	30,599	ditto	33,767
Ditto	Grand Total ...	...	...	80,180	ditto	83,348
Ditto	Total, column 10	...	...	1,43,039	ditto	1,46,207
Ditto	Grand Total, last column	...	...	6,50,985	ditto	6,54,153
Para 22, "the surplus ...	..	...	...	7,54,176	ditto	7,51,008

Para. 22, "exceeds by over one lakh of rupees" should be "exceeds by Rs 97,032 that of 1886-87," &c.

Para 22, "the total expenditure has also risen, but in much smaller proportion, from Rs. 8,38,749 to Rs. 9,59,983," the latter figure should read "6,63,151." The figure Rs. 6,50,985 in this paragraph should be 6,54,153.

Para 23, 3rd line ... ... Rs 2,56,752 should be Rs. 2,59,920

No. 71 of 1890-91.

From

S. EARDLEY-WILMOT, Esq.,

Offg. Conservator of Forests, Central Circle,

North-Western Provinces and Oudh,

To

The SECRETARY to GOVERNMENT,

North-Western Provinces and Oudh,

Revenue (Forests) Department.

Dated Naini Tal, the 4th July 1890.

Sir,

I have the honor to submit the Annual Progress Report on Forest Administration in the Central Circle for 1889-90.

I have the honor to be,

Sir,

Your most obedient servant,

S. EARDLEY-WILMOT,

Offg. Conservator.

CENTRAL CIRCLE REPORT.

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E.—Statement showing yield of bamboos for the eight years 1882-83 to 1889-90.

Annual Statements—Forms Nos. 49, 50, 51, 52, 54, 55, 56, 57, 58, 59, 60, 61, and 62.

BY ORDER OF THE LIEUTENANT GOVERNOR OF BENGAL * FORWARDED

CENTRAL CIRCLE.

N.-W. PROVINCES AND OUDH.

ANNUAL PROGRESS REPORT
OF
FOREST ADMINISTRATION,

For the year ending 31st March 1890.

By S. Eardley-Wilmot, Esquire, Officiating Conservator of Forests.

INTRODUCTION.

The record of the past year's administration of the forests of the Central Circle shows decided advance in every direction. The area under special protection has been increased, export has been further facilitated by the construction of new roads, the welfare of the executive and protective staff, so much dependent on the provision of suitable quarters, has not been lost sight of, and at the same time revenue has increased and the percentage of expenditure diminished.

2. Considerable progress has also been made in increasing the area of State forests. The new reserves in the forests of the late Iron Company's grant and in the Gagar-Ninglat were gazetted, whilst the Dolmar-Morar forests, the Káludanda forests and areas in Jhánsi and Bánda were under settlement at the close of the year. The preparation of working plans has been proceeded with as far as was feasible.

BENGAL SECRETARIAT LIBRARY.

CHAPTER I.

AREA AND BOUNDARIES.

1.—Area.

3. The receipt of a register of revised areas from the Forest Survey Branch, and the addition of newly-acquired forests, has resulted in considerable changes in the area of the Circle, as the following statement will show :—

Divisions.	Area on 1st April 1889.	Added during 1889-90.	Excluded during 1889-90.	Area on 31st March 1890.
Naini Tal	30 sq. miles ...	39 sq. miles ...	...	69 sq. miles.
Kumaun	535 „ „ ..	83 acres ...	57 sq. miles ..	478 „ „
Garhwál	500 „ „ ..	39 sq miles .	28 „ „ ..	511 „ „
Gangas	349 „ „ ...	3 „ „ ..	2 „ „ ...	350 „ „
Jhánsi	37 „ „ ..	12 acres ...	...	37 „ „
Lalitpur	140 „ „ ..	...	...	140 „ „
Total, Reserved Forests ...	1,591 „ „ ..	81 sq. miles .. 95 acres .	87 sq. miles ..	1,585 „ „
Naini Tal	65 sq. miles ...	1 sq. mile in round number	2 sq. miles in round number.	64 sq. miles.
Lalitpur	4 „ „ ...	...	...	4 „ „
Total, Protected Forests ...	69 „ „ ...	1 sq. mile ...	2 sq. miles ...	67 „ „
Bánda	118 „ „ ...	...	...	118 „ „
Total, Unclassed State Forests ...	118 „ „ ...	...	...	118 „ „
Grand Total ...	1,778 „ „ ...	82 sq. miles .. 95 acres ..	89 ...	1,771 „ „ ...

In Naini Tal the reduction is due to revision of area and exclusion of village lands, and the increase to addition of newly gazetted areas.

In Kumaun variations are due to revision of area and exclusion of village lands, whilst 14 acres were also disafforested, being given in exchange for a house site.

In Garhwál and Ganges the changes are similarly explained.

In Jhánsi 12 acres were added to reserves within civil lines.

In Bánda the area of the $\frac{55}{45}$ lands was decreased by 751·19 acres, in consequence of the purchase of the village Chúlaha; a corresponding increase of purely Government forest occurs, the total remaining unaltered.

4. The following forests were gazetted as reserved during the year:—Dhabka, Dechauri, Fatehpur, and Khurpa Tal, being 109 square miles; and Gagar-Ninglat, 37 square miles.

5. Notifications proposing reserves were issued in the following Divisions:—

Naini Tal Division.—The Dolmar-Morar forests area about 16 square miles, and is surrounded on nearly all sides by State forests. The settlement will be made early next season.

Ganges Division.—The Káludanda forests, area about 26 square miles. The settlement is complete, and the notification under section 19 of the Act will shortly issue.

Jhánsi Division.—Settlement of the new reserves, area about 12 square miles, is completed, and there remains to tabulate the rights and issue the notification.

Bánda Division.—The proposed reservation of about 87 square miles of Government forest, hitherto unclassed, is proceeding, and will be completed next winter. The reserves have been demarcated by the Forest Settlement Officer, about 150 miles of boundary line cleared, surveyed, and compared with existing maps; but some appeals have still to be decided.

6. Certain questions affecting the boundaries of, and the rights exercised in, the Airideo forest, which is to revert from the charge of the District Officer to this Department, were enquired into and settled. This area will shortly be included in Government forests.

2.—Boundaries.

7. The boundaries are in good order, and demarcation pillars satisfactorily kept up. The addition of new areas necessitates increased expenditure under this head. Where advisable inspection paths are constructed following the boundaries. The detail of work by Divisions is given below:—

Naini Tal Division.—Rupees 131 spent during the year. The boundaries are intricate, and the necessity of erecting intermediate pillars has become apparent. This was done this year in the Siun block, and the work will be continued. The revised boundary of the Ránikhet cantonment has been sanctioned, and demarcation will now be arranged for.

Kumaun Division.—Rupees 422 spent. The boundaries are in good order, and the demarcation of the area open to rights in the new reserve has been commenced.

Garhwál Division.—Rupees 157 spent in up-keep of boundary. A dispute at Amangarh in which the Rája of Káshipur claimed some forest land was decided in favour of this Department by the arbitration of Colonel Sandeman of the Survey of India, who kindly had a comparative survey made.

Ganges Division.—Rupees 403 spent in repair of existing pillars in completing demarcation of area under dispute at Chandi and in commencing the permanent demarcation of the Káludanda reserves. The claim of the Landhaura Ráni to certain islands in the Ganges is still before the Courts.

Jhánsi Division.—Rupees 980 spent, and boundary work pushed on with great vigour. Temporary pillars were erected and boundaries corrected to facilitate the work of the survey party employed in these forests. New stone pillars were erected to replace defective and missing pillars, whilst other pillars were repaired and serial numbers inserted. The work was still in hand at the close of the year.

Lalitpur Division.—No work was done during the year; the boundaries are in good order.

Bánda Division.—Rupees 157 spent in clearing boundary lines, and erection of boundary pillars will follow the Forest Settlement Officer's demarcation as soon as the reserves are gazetted.

CHAPTER II.

SURVEYS, WORKING PLANS, AND ANNUAL PLANS OF OPERATIONS.

1.—Surveys.

8. Considereble progress was made in survey work during the year, as the following details will show :—

Naini Tal Division.—The boundary survey of the Siun block was made by the Divisional Officer and pillars erected.

Kumaun Division.—The survey of pillars demarcating areas open to rights in the new reserve was carried out.

Jhansi Division.—The survey of the forests of this division was undertaken by Colonel Sandeman, Deputy Superintendent, Survey of India, and the mapping and computation are now in progress. Although the areas are not finally computed, it is evident that the revised areas will show an increase of about 9,000 acres or 36 per cent. over the estimated areas.

Lalitpur Division.—A traverse survey of the 144 square miles of forest in this division was also carried out under Colonel Sandeman's order. It is expected that the result of computations will also be to increase the area of these forests.

9. The set of maps of the 4″ Kumaun and Garhwál forest survey was completed by receipt of the only outstanding sheet, and 42 sheets of the 2″ reduction of this map were received during the year, completing the series. The work of providing Range Officers with sets of 4″ maps was continued and approaches completion.

10. It is hoped that next season the boundary survey of the Dolmar-Morar forest will, after settlement, be carried out by the Forest Survey Branch, and that with the sanction of Government a detail survey on the 4″ scale of the Lalitpur forests and of the Káludanda reserve will be undertaken.

2.—Working Plans and Plans of Operations.

11. There are now in this Circle five permanent Working Plans :—

Naini Tal	} Naini Tal Division.
Ranikhet	
Nandhaur	... Kumaun Division.
Ganges	... Ganges Division.
Rehar	... Garhwál Division.

and three temporary Working Plans :—

Kosi	} Garhwál Division.
Patli Dún	
Kohtri	... Ganges Division.

Although the fellings in the Kohtri were this season regulated by the working plan drawn up for this forest by Mr. F. B. Bryant, the plan is still in the press and has not therefore been submitted for final orders.

12. As noted last year, the forests not affected by these plans are, however, systematically worked by entries made in the annual programme of work, which ensures regular continuance from year to year of such operations as are needful for the welfare of the forests and the maintenance of revenue. An officer who could devote his energy to formulating simple working plans for such forests as would benefit by regular working, would in a very few seasons do much to bring all the more important areas under adequate control, whereas officers holding charge of the large Divisions in the sub-montane forests have not the time to spare from executive work to attend to this speciality, although their assistance and local knowledge would render the task of a district Working Plan Officer comparatively easy. The advantage of present control and the value of permanent record cannot be overrated, and it is hoped that an officer in excess of divisional requirements may shortly be available for this important duty in this Circle.

13. In the Kumaun Division improvement thinnings were started with fair results in the immature sál forests of Horai, and it is proposed to continue this work and extend it to other similar forests in the division. The system adopted was the marking of selected trees over a defined area under the supervision of the Divisional Officer, the right of export being sold by tender. Attempts previously made in this direction in other divisions failed, suitable men not being available for the work from other duties; but if the establishment is sufficiently strong to permit of this special work being carried out, the system leaves nothing to be desired; otherwise a more mechanical method of treatment adapted to the ability of the ordinary forester must be adopted. Plans of operations for each working circle, must be drawn up in any case, so as to ensure regular working and record. The time has now arrived when some method of working should be introduced into the khair forests of the Kumaun Division, by which fellings would be probably most advantageously regulated by area and include the extraction of mature trees whether richer or poorer in kattah. In the Garhwál Division the forest of Garhibulchand and parts of kotah and Chilkia would also benefit by thinning operations. Such are some of the temporary working plans which might be drawn up by an officer deputed for the work, with the result both of improving the forest and increasing revenue.

14. The question of the systematic regulation of workings in the bamboo forests of this Circle was the subject of remark in the last annual report and has received special attention during the past year. The result of closure of a proportion of the area under bamboo has had a very good effect on the condition of the forests and on the quality of export, whilst revenue has not fallen off. A temporary plan of operations regulating cuttings in Kumaun was drawn up during the year, and it is hoped that, with data now available, it will be possible to arrange for a uniform system throughout the sub-montane forests of the Circle. This can readily be done as soon as the period of rotation best suited to these forests can be fixed with some degree of certainty, when the percentage of area to be closed can also be determined.

3.—Annual Programme of Works.

15. Unexecuted works are detailed in Appendix A.

CHAPTER III.

1.—Protection and Improvement.

16. The charge of the Circle was held throughout the year by Mr. C. Bagshawe, Conservator.

17. Divisional charges were held as follows :—

i. Naini Tal	...	Mr. F. B. Bryant, Offg. Deputy Conservator.
ii. Kumaun	...	Mr. A. G. Hobart-Hampden, Ditto.
iii. Garhwál	...	Mr. S. Eardley-Wilmot, Ditto.
iv. Ganges	...	Mr. W. R. J. Brereton, Deputy Conservator, from 1st April 1889 to 4th November 1889. Mr J. M. Blanchfield, Sub-Assistant Conservator, from 5th November to 6th December 1889. Mr. N. Hearle, Deputy Conservator, from 7th December 1889 to the end of the year.
v. Jhánsi	...	Mr. R. G. Hardy, C.S , Deputy Commissioner.
vi. Lalitpur	...	Mr. J. V. Sturt, Deputy Commissioner.
vii. Bánda	...	Mr W. Hoey, C.S., Collector, assisted by Mr. R. H. Macleod, C S, Assistant Collector, and by Kunwar Jwala Prasad, Assistant Collector, in charge, Karwi Sub-Division.

The Ganges Division has been unfortunate in transfers of officers during the working season, but with this exception divisions have been held by officers whose local experience has without doubt contributed largely towards any success which may be apparent either in executive or administrative work.

18. The following statement shows the sanctioned grants for protective and office establishments together with the expenditure of the last two years :—

Year.	Executive and protective establishment.			Office establishment.		
	Permanent.	Temporary.	Actual expenditure.	Permanent.	Temporary.	Actual expenditure.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1888-89 ...	35,040	24,158	55,058	11,154	591	11,745
1889-90 ...	35,040	24,050	55,424	11,184	618	11,802

The staff consisted of 587 in the executive, and 34 in the office establishment, against 583 and 33 respectively last year.

19. No progress can be recorded towards improving the pay and prospects of the Range Officers, which are not at present satisfactory. There are a certain number both of trained and untrained Foresters who, by long and approved service, have well earned promotion to the Ranger class. During the past year 20 ranges out of 23 were held by Foresters. The prospects of these men, unless they speedily receive promotion, will become yearly less hopeful, owing to the appointment of trained Rangers from the Forest School, and this question, together with that of improving the promotion of passed Rangers, is one which should receive attention.

20. With regard to the utilisation of the advantages afforded by the Imperial Forest School this Circle is situated as detailed below :—

Passed Forest Rangers	...	3	Two on special duty and one recently joined.
Probationary Rangers	...	5	At the Forest School.
Passed Foresters	...	7	Employed in various divisions.
Probationers in the Forest	...	1	...
Forester Probationers	...	2	Selected during the year.
Total	...	18	

One passed Forest Ranger resigned his appointment during the year.

21. Range Officers are, as a rule, well reported on by their Divisional Officers, though in some few cases indolence and stupidity is complained of, and, in one instance, a forester was reduced and transferred for a graver fault.

22. The subordinate staff worked well, but suffered much from sickness in the submontane forests, where deaths amongst the establishment reached 3 per cent. There is no doubt that the climate of these forests is particularly unsuited to hill-men, and this should be considered when filling up vacancies. Many of the subordinates are quite useless for the seven unhealthy months of the year, and there are few who are capable of good work after 15 years' service.

2.—General Protection and Breaches of the Forest Law.

23. The following is an abstract of cases before the courts and compounded as compared with 1888-89 :—

Divisions.	Year.	Cases pending and new cases.	Prosecutions. Convictions. Cases.	Convictions. Persons	Acquittals Cases	Acquittals Persons	Cases pending Cases.	Cases pending Persons.	By what Court tried.	Cases compounded under section 67, Act VII of 1878. Cases.	Persons	Rupees
Naini Tal ...	1888-89 ...	24	17	45	7	48	...	...	...	372	587	1,058
	1889-90 ..	5	2	3	1	1	2	4	By Magistrate of Naini Tal.	308	467	404
Kumaun ...	1888-89 ...	2	2	2	...	...	...	...	...	86	107	599
	1889-90 ..	2	2	2	...	...	...	...	1 by Magistrate, Tarai 1 by Magistrate, Bhábar.	90	131	773
Garhwál ..	1888-89 ...	2	1	1	..	1	...	...	...	46	76	356
	1889-90 ...	7	3	4	1	13	3	9	1 by Magistrate, Garhwál. 5 By Magistrate, Bhabar. 1 By Magistrate, Bijnor	54	96	599
Ganges ...	1888-89 ...	2	1	2	1	1	...	...	...	67	101	574
	1889-90 .	...	...	...	...	...	...	...	...	60	111	475
Jhánsi ...	1888-89 .	1	.	.	1	1	...	...		1	1	1
	1889-90 ...	10	10	12	...	1	...	...		...	...	...
Lalitpur ...	1888 89 ...	5	3	8	2	4	...	...	By District Officers,	...	..	...
	1889-90 ...	4	1	2	3	3	...	...		...	...	...
Bánda ...	1888-89 .	12	12	58	...	...	...	...		...	...	...
	1889-90 ..	4	4	8	...	...	...	...		...	...	...
Circle ...	1888-89 ...	48	36	116	11	55	1	13	...	572	872	2,548
	1889-90 ...	32	22	31	.. 5	18	5	13	...	518	805	2,181

From this it will be seen that cases before the courts fell from 47, involving 171 persons, to 27, involving 49 persons. The chief difference is in Naini Tal, where the Divisional Officer reports a decrease in the number of trivial offences. The totals under cases compounded do not vary much from those of the preceding year. The Naini Tal Division shows a great decrease in amount realised, owing to the heavy compensation paid last year by the authors of the Hinnan fire. The variations under Kumaun and Garhwál are due to sums of Rs. 246 and 250 accepted in compounding offences against export regulations.

24. The most important cases were the conviction of a Forest Guard for embezzlement in Kumaun and his sentence to one year's imprisonment, and the sentence of three and six months' imprisonment on two persons for theft of forest produce in Garhwál.

25. The revision of section 67 of Act VII of 1878 by section 20 of Act V of 1890 will probably result in a decrease of cases compounded with a correspondiug increase of cases before the courts.

3.—Protection from Fire.

26. The past season has not been favourable for fire conservancy, the extreme dryness of the winter and the great heat in May rendered protection difficult; rain, however, commenced to fall early in June, and by the middle of the month the forests were safe from fire. The results, therefore, compare unfavourably with those of last year which was abnormally successful. Large additions were made to the areas under regular protection, chiefly in Kumaun, where 73,606 acres, and in the Ganges, where 15,710 acres, were added to forests protected from fire. The total increase in specially protected forests amounted to 89,294 acres.

27. The following statement compares the results of fire conservancy for the past two years. The figures given last year have been corrected so as to admit of comparison with the revised areas of this year :—

Year of fire season.	Area in which protection was attempted			Failures.	Area actually protected.	Cost of the operations of the year.	Cost.		Percentage of the area attempted to total area of the forest.	Percentage of failure to the total area attempted.
	(i) By means of a regular system of fire lines and watchers.	(ii) By the ordinary establishment under administrative orders and with the aid of the village or trifling expenditure on watchers, &c.	Total of (i) and (ii).				Per acre attempted.	Per acre protected.		
	Acres.	Acres.	Acres.	Acres.	Acres.	Rs.	Pies.	Pies.	%	%
1889 (i) ...	374,294	...	...	2,036	372,258	18,717	9·60	9 65	35 38	0·54
1889 (ii) ...	...	48,587	...	561	48,026	102	·40	·40	4 59	1 15
Total ...	374,294	48,587	422,881	2,597	420,284	18,819	8 54	8 59	39 97	·61
1890 (i) ...	464,118	...	...	24,580	439,538	18,797	7·77	8 21	43·87	5 29
1890 (ii) ...	...	48,057	...	6,838	41,219	...	...	...	4 54	14 22
Total ...	464,118	48,057	512,175	31,418	480,757	18,797	7 04	7·51	48·41	6 13

It is satisfactory to note a decrease in the cost per acre throughout the Circle of 1·5 pies; this improvement, however, occurred in the plains forests, and there is slight hope of reducing expenditure under this head in the hills, where the difficulties in the way of successful protection are very great. 48·41 per cent. of the total area of the Circle is now under fire protection.

28. The following statement gives in detail by divisions a comparison of the working of the last two years :—

Division.	Area attempted. Acres.		Area attempted. Percentage of total area of Divisions.		Area protected.		Failures. Acres.		Failures. Percentage of area attempted.		Cost.		Cost per acre attempted in pies.	
	1890.	1889.	1890.	1889.	1890.	1889.	1890.	1889.	1890.	1889.	1890.	1889.	1890.	1889.
											Rs.	Rs.		
Naini Tal,	70,118	70,118	82 51	82·51	67,545	67,707	2,573	2,411	3·67	3·43	1,306	867	3·57	2·3
Kumaun,	120,806	47,200	40 05	15 65	115,071	47,019	5,735	181	4 71	0 38	4,128	4,223	6 5	17 18
Garhwál,	181,709	181,709	59 04	59·04	178,051	181,709	3,658	...	2 01	...	9,281	9,045	9·80	10·19
Ganges,	80,716	74,000	24 82	28 73	77,102	74,000	12,614	...	14 00	...	3,084	3,884	7·88	10 07
Jhánsi ...	23,923	23,945	100 00	100 00	23,912	23,945	11	...	0 04	...	298	100	2·39	0 80
Lalitpur,	25,903	25,903	28 09	28·09	19,076	25,898	6,827	5	26·39	0·02	100	100	0 74	0 74
Total ...	512,175	423,881	48·41	39·97	480,757	420,281	31,418	2,597	6 13	0·61	18,797	18,819	7 04	8·54

It will be seen that the three sub-montane divisions all show a reduction in expenditure per acre.

29. The detail of casualties by divisions reads as below :—

Naini Tal Division.—Nineteen fires, 2,573 acres burnt. Of these fires, the cause of seven which burnt over 649 acres is unknown, although it is presumed that they were lighted in some cases for pure mischief by soldiers and, in others, the carelessness of travellers is responsible. Two fires, aggregating 57 acres, were caused by the carelessness of subordinates and contractors; one fire of 30 acres came in from the outer forests, and the remaining nine fires, which burnt over 1,837 acres, are attributable to gross carelessness on the part of villagers and soldiers. Rupees 81 were exacted in fines from villagers and subordinates and one Forest Guard was reduced, whilst Rs. 101 were recovered in fines from villagers who refused assistance when called on for aid and resisted lawful arrest. From this it will be seen that only 87 acres were burnt by preventible causes, and the results of protection in this division may be considered very satisfactory in spite of the unfavourable season.

Kumaun Division.—There were 11 fires over 5,735 acres. Of these fires the cause of one, which burnt 1,571 acres, could not be traced, but was probably due to incendiarism or to smoking for honey, whilst the other 10 occurred when clearing fire lines or burning the outer forest. The Divisional Officer was much hampered by the death of an experienced ranger and by the large extent of new forest under protection; the results of protection in Kumaun are, considering these drawbacks, extremely good.

Garhwal Division.—Five fires occurred over 3,658 acres. Of these three fires which burnt 27 acres are due to accidents when burning fire lines, one fire over 2,968 acres was caused by lightning, and the remaining 663 acres were burnt, it is believed, by the act of an incendiary. The case is now in the hands of the police. The results in Garhwál may therefore be held to be satisfactory.

Ganges Division.—Two fires occurred; the cause of one, burning 112 acres, is unknown, the second fire, which consumed 12,502 acres, was probably caused by exporters, but no proof was forthcoming.

Jhansi Division.—The excellent arrangements made show in result only one fire of 11 acres.

Lalitpur Division.—The Deputy Commissioner reports a fire, burning over 6,827 acres, during May, and notes that it spread from a zamíndári forest, and that the zamíndárs have entered into an agreement not to permit this in future.

Banda Division.—The Deputy Commissioner reports two fires over 3,750 acres, as against 28,634 acres burnt over last season, and attributes this great success to the superior arrangements made in clearing outer fire lines.

30. A comparative abstract of the above information is given in the statement below :—

Year.	By the forest establishment when burning fire lines.		Fires which entered the forest by crossing exterior fire lines.		By workmen (not in forest employ) by accident.		By villagers, travellers or soldiers by accident.		Fires caused by lightning or fire balloons.		Maliciously lighted inside the forests.		Cause unknown.		Total.	
	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.
1890 ...	5	84	12	11,075	1	12,502	9	1,837	1	2,068	1	663	10	2,289	39	31,418
1889 ...	2	980	5	746	...	...	7	787	...	...	1	14	5	70	20	2,597
1888 ...	5	613	1	365	3	363	3	239	3	658	7	3,050	9	959	31	7,147
1887 ..	3	284	8	6,768	5	80	47	7,717	1	10	4	7,707	7	. 398	70	22,964
1886 ..	6	196	...	...	2	49	1	8	...	...	1	17	...	...	10	270

4.—Grazing and Fencing.

31. The areas which may be closed to grazing are detailed in Appendix B, and are the same as in former years, with the exception of an increase of four square miles in Naini Tal as noted below; but there is a considerable diversity in the system adopted in various forests in the Circle. For instance, in Garhwál the fire protected area is closed to grazing throughout the year; in Kumaun and Ganges grazing is permitted in some closed forests at certain seasons; in Naini Tal grazing and fire protection go together, except in the reserve. In the submontane forests the actual area in which grazing is permitted varies from year to year, but is always considerably larger than the area burdened by grazing rights. These variations in practice are dependent on the requirements of the people and care is taken by a system of yearly permits that where grazing is permitted in forests free of rights no right shall be established by long custom.

32. The grazing dues and grass sales of the year are as follows :—

	Grazing. Rs.	*Grass.* Rs.	*Total.* Rs.
1888-89	22,505	5,377	27,882
1889-90	17,459	6,132	23,571

The decrease under grazing is referable to non-realisation of dues within the financial year.

33. The scheme for defining the number of cattle entitled to graze in the submontane forests is still in hand. The subject is an intricate one and most important as regards the welfare of these forests; it is therefore satisfactory to note its approaching completion.

34. **Naini Tal Division.**—The closure scheme in terms of the Ránikhet working plan was sanctioned during the year. The question of enclosing these areas, 13 in number and aggregating 2,568 acres, is now under consideration. Without fencing any improvement is impossible, and it is proposed to protect the areas against cattle by running a single barbed wire from tree to tree, completing the work as funds permit. Before final enclosure such trees as would impede natural reproduction would be removed and, in places where there is a demand, the yearly crop of grass would be cut and exported as is advocated in the working plan for these forests. The fencing of the Ránikhet reserve might with advantage be altered from a double unarmed, to a single barbed, wire. The revenue from grazing and grass amounted to Rs. 3,597 against Rs. 2,872 in 1888-89. The increase is due to better grass sales in Ránikhet.

Kumaun Division.—The difference in receipts of Rs. 2,045 in 1889-90 against Rs. 7,474 in 1888-89 is referable to non-realisation during the official year of grazing dues which have subsequently been credited.

Garhwal Division.—There is no change in area closed. The revenue shows Rs. 3,312 against Rs. 3,044 in 1888-89.

Ganges Division.—The Gújars have practically ceased from giving trouble by illegal lopping, but the necessity for more strictly regulating the system providing trees for leaf fodder is apparent and will have attention. The receipts were Rs. 6,044 against Rs. 6,166 in 1888-89.

Jhansi Division.—The income from sale of grass continues satisfactory. The current demand was slightly less than in the previous year, but revenue has advanced on account of short realisations last season. Rupees 4,903 were realised against Rs. 4,659 in 1888-89.

Lalitpur Division.—The Deogarh, Garauli, and Sairwans forests are closed to grazing: in other forests a system of passes obtains; whilst in Talbahat pargana the zamíndárs have grazing rights. The extinction of these rights at the close of the present period of settlement was advocated, but the period having been extended for 10 years, the grazing rights will also be continued for that term. The receipts in 1889-90 were Rs. 2,614 against Rs. 2,612 in the past year.

Banda Division.—Receipts Rs. 1,057 against Rs. 1,056 in 1888-89.

5.—Natural Reproduction.

35. The winter was extremely mild and the absence of frost favourable to young growth. Sál again seeded freely, and again there was no chír seed available, but on the other hand there was a plentiful crop of acorns. Natural reproduction in fire-protected areas is well reported on from all divisions. In the submontane forests it is generally agreed that in many places successful fire conservancy has resulted in the formation of such perfect overhead cover that further reproduction is impossible until thinnings are undertaken, whilst in other places the filling up of blanks, formation of overhead cover, and consequent dying down of grass is proceeding slower. In all cases, however, in a more or less degree improvement of the soil, followed by replacing of grass by tree growth, is resulting from protection.

36. In the hill forests the results of fire protection in chír forests is most marked and satisfactory. Mr. Bryant, however, draws attention to the disastrous consequences of fire in areas which have been protected for some years and proposes to experiment on certain areas of forest with the object of ascertaining the effect of forest fires lighted in the winter months and kept under control. There is no doubt of the extremely injurious effects of fire in chír forests after some years of successful protection; in these circumstances not only is the young growth utterly destroyed, but mature trees are killed, perhaps in such numbers as to render necessary a modification of the proposed working of the forest. In the hill forests of this Circle, honeycombed with cultivation, and in the vicinity of a large settlement and cantonments, perpetual immunity from fire cannot be expected even with the best arrangements, and the removal of the thick surface layer of partially decomposed humus, the result of the fall of needles in successive years, at once a source of danger by fire and a hindrance to germination, is a question for serious consideration. Where grazing is permitted this surface layer does not exist to any detrimental extent, but neither is the reproduction so satisfactory as could be wished; seedlings being trodden down or browsed over; the introduction of cattle, therefore, in a chír forest where reproduction is irregular is to be avoided, doing more harm than good, whilst the demand for pine needles for litter is so small as to have little effect.

37. In the sub-montane forests not under fire protection the state of the reproduction depends chiefly on the amount of grazing. It may be stated generally that reproduction is good if the young growth has the chance of existence. Unfortunately grazing and export are both facilitated by the removal of the old crop of grass, and as fire is less costly and more effective in this removal than the sickle, the areas much utilised for grazing rarely escape fire and reproduction is poor.

6.—Artificial Reproduction.

38. No artificially protective measures are necessary in the Circle save in the hill forests. The sums expended during the year compare with last year's figures as below :—

	Regular plantations.	*Cultural operations.*
	Rs.	Rs.
1888-89	1,784	1,266
1889-90	1,263	1,257

The area of plantations has decreased from 1,093 acres to 1,063 acres, nine acres being added and 39 acres in Jhánsi abandoned.

39. **Naini Tal Division.**—Rupees 277 were expended in planting out 15,440 deodár, cypress, ash, and chestnut trees, and in collecting seed. Rupees 232 were expended in planting 7,825 chestnut trees and sowing 120lbs. of acorns for the formation of a 30 feet avenue on each side of the Almora cart-road where it passes the Ránikhet reserve. The work was undertaken with a view to facilitate fire conservancy. All young trees did extremely well until the failure of the winter rains when many died of drought.

40. The Chaubattia forest nursery was kept in thorough order by Mr. Craw. The financial results are as below :—

	Revenue.	*Expenditure.*
	Rs.	Rs.
1888-89	1,431	1,784
1889-90	1,668	1,263

The fruit crop was a good one, but an unfavourable spring will result in a poor crop this season : 390lbs. of fruit tree seed and 797lbs. of forest tree seed was sown in the nursery. The autumn sowings germinated well, but the spring sowings were to some extent affected by the abnormal dryness of the season : 7,930 fruit trees were distributed during the year against 14,398 given away in 1888-89 ; the decrease is attributable to the unfavourable season : 180lbs. of fruit tree cuttings were forwarded to Kashmír for grafting purposes : 17,820 forest trees were distributed to various departments and to villagers.

The nursery stock at the close of the year was as under—

	Fruit trees.	*Forest trees.*
1888-89	56,470	92,881
1889-90	63,614	55,901

41. **Kumaun Division.**—Rupees 243 were expended on the Chorgalia and Haldwáni gardens where the planting of fruit trees was continued.

Garhwal Division.—Rupees 193 were spent. A further five acres at Chopra were sown with mixed seeds of khair, shisham, amaltás, &c., with favourable results. The planting of Malta lemons was continued at Rámnagar, and young trees will shortly be available for distribution.

Ganges Division.—Rupees 65 were expended on the maintenance of mango groves.

Jhansi Division.—The plantations at Sukhwan and Ganupura were kept up, sál and teak seed sown, and some bamboos planted, at a cost of Rs. 240 : 39 acres at Bhasneo and Magarpur were abandoned owing to ill success.

Lalitpur Division.—No new plantation work was done owing to failure in germination of seed sown.

Banda Division.—Two acres were sown with teak, shisham, mahua, and jaman, at a cost of Rs. 7.

7.—Climber cutting.

42. Work was continued in the submontane forests as usual :—

	Square miles.	*Rate per square mile.*	*Total.*
		Rs. a. p.	Rs. a. p.
1888-89	30	34 6 3	1,031 12 2
1889-90	18	61 6 10	1,105 11 11

Kumaun Division—

	Acres.
Jaunlasal	1,300
Horal	168
Nindhaur	905

Total 2,373 acres, cost Rs. 56, or 45 pies per acre.

Garhwal Division—

	Acres.
South Patli Dún	1,980
North Patli Dún, compartments 12 and 13	519
Rohar, compartments C and D	2,105

Total 4,604 acres, cost Rs. 555-5-9, or (deducting expenditure on previous year's work, Rs. 130-0-9) 17·7 pies per acre.

Ganges Division—

	Acres.
Andher Majhera, 1 and 2	1,410
Gwalgarh, 4	674
Sukrao, 11	470
Dabnia, 3 to 8 and 46, North Kohtri 1 and 2	2,231

Total 4,785 acres, cost Rs. 404-6-2, or 19·8 pies per acre.

43. The cost of climber-cutting operations must necessarily vary considerably with the growth of the climber and the accessibility of the locality. It has been found that with a forest freely overrun with climbers, the first cutting in fairly easy ground costs from 12 to 18 pies per acre, and this rate increases or diminishes in proportion to the difficulties encountered. The high rates in the Ganges Division are attributable to the great number and size of the climbers in the forests worked over, which had not been interfered with since fire conservancy was established. The success attending climber cutting in the forests of this Circle is very apparent when comparison is made with such outside forests as have not had the advantage of the forester's assistance.

8.—Experiments and Exotic trees.

44. The usual measurements to ascertain the annual growth of sál and other trees were made and are appended in abstract (see appendix C). It will probably be advisable to arrange for further measurements of growth of sál by demarcating other sample plots where the conditions are dissimilar to those obtaining in the present plots.

45. Experiments in reference to kattha-boiling were carried out by Mr. Hobart-Hampden in Kumaun to determine whether in practice the yield of kattha from those trees considered unsuitable by manufacturers was less than from such trees as were approved of by them. The result showed that trees selected by the manufacturers yield nearly 30 per cent. more kattha than the trees rejected by them. At the same time a comparative chemical analysis of approved and rejected woods made by Dr. Warth gives the following results, and shows also that the khair of Eastern Kumaun is singularly rich in catechin containing 50 per cent. more than Burma wood.

	Wood approved by manufacturers.	*Wood rejected by manufacturers.*
Average amount of extract	18 62 per cent.	9·75 per cent.
Maximum amount of catechin	9 „	5 „

It is also evident from Dr. Warth's interesting report that much adulteration of kattha takes place after leaving the forest and before being offered for sale in the bazaar.

46. The reason of the utter absence of haldu seedlings, as noted on in the Nindhaur Working Plan by Mr. Hearle, has not yet been solved. It is possible that natural reproduction does not take place except on new soil, as is the case with shisham. Special facilities for natural reproduction were afforded to a clump of haldu trees in the Chungad block, Kumaun Division, and the result will be watched.

47. The counting of seedlings in the 20 feet square Dungalgarh sample plot commenced in 1886 was again carried out; but it is doubtful if any useful purpose is served by this enumeration, as there is no certainty as to the age of the seedlings on the ground, which may be the result of seed fall of subsequent years, and the variations in number point to this unmistakeably :—

1886	December	525 seedlings.
1887	May	*Nil.*
1888	January	76 seedlings.
1888	May	93 „
1889	April	130 „
1890	April	81 „

9.—Communications, Buildings, and other works.

48. The following statistics will show the work done during the year :—

(a). Roads.

		Miles.	*Cost.*	Rs.
New cart roads		30	„	6,974
New bridle roads		83	„	2,829
New paths		24	„	442
Total new roads	...	137	„	10,245
Temporary export roads under A-II	...	67	„	1,189
Repair of existing roads ...	...	1,650	„	24,379
Total expenditure on roads	...	1,854	„	35,813

The corresponding figure for 1888-89 was Rs. 35,724.

(b). Buildings.

	No.	*Cost.*	Rs.
New buildings	27	„	12 372
Repairs and improvement of existing buildings,	92	„	4,832
Total expenditure on buildings	... 119	„	17,204

The corresponding charge for 1888-89 was Rs. 16,651.

Other Works.

	Rs.	
New Works	288	Making and clearing wells, camping-grounds, &c.
Maintenance of existing works	309	
Total, other works	... 597	

The corresponding charge for 1888-89 was Rs. 470.

49. The principal road work was in the Kumaun and Garhwál Divisions; in the former the construction of the Sarra nadi cart road was continued and, in the latter, the Adnála valley road was completed. The same divisions also show the greatest activity in building.

(a). Roads.

50. **Naini Tal Division.**—

	Rs.
New roads	1,077
Maintenance	144

Twenty-five miles nine chains of bridle roads and paths were constructed, and existing paths kept up.

Kumaun Division—

	Rs.
New roads	5,939
Maintenance	7,325

Seventeen miles of cart road, 22 miles of bridle roads, and 15 miles of paths, were constructed. The excess under maintenance is referable to extraordinary improvements, such as widening and gradient work in the hill cart roads, and to charges made in this year for work carried out last season.

Garhwal Division—

	Rs.
New roads	2,619
Maintenance	12,181

Six and-a-half miles of cart road, nine miles of bridle roads, were constructed. Existing communications were kept up, and a sum of Rs. 1,181 expended in embanking the submontane district road.

Ganges Division—

	Rs.
New roads	560
Maintenance	4,343

Six miles 70 chains of cart roads, 13 miles 72 chains of bridle roads, and 7 miles 32 chains of paths, were made.

Jhansi Division—

	Rs.
New roads	50
Maintenance	90

Fifteen miles of new road were constructed, and ordinary repairs carried out.

Lalitpur Division—

	Rs.
New roads	*Nil.*
Maintenance	250

Thirty miles of road were repaired.

Banda Division—

	Rs.
New roads	*Nil.*
Maintenance	46

Only one road was repaired, as the others, owing to the lime quarries not being much worked, did not require it.

(b.) BUILDINGS.

51. **Direction Division—**

	Rs.
Maintenance	400

The money was spent in enlarging the office buildings.

Naini Tal Division—

	Rs.
New buildings	650
Maintenance	264

Four new quarters for guards were constructed, and improvements made in existing quarters.

Kumaun Division—

	Rs.
Nine new buildings	4,850
Maintenance	2,566

Houses at Danda Kathauti and Horai, and out-houses and Foresters' quarters at Haldwáni, were completed during the year; whilst quarters were commenced at Horai and Sarkhet and houses at Kaludeo and Shuntra. The expenditure under maintenance includes minor improvements to existing buildings. It is satisfactory to note that buildings are being pushed forward in Eastern Kumaun where the climate in autumn and summer is very deadly, and house accommodation is urgently required.

Garhwal Division—

	Rs.
New buildings	3,529
Maintenance	871

Six new quarters for Foresters were completed during the year; a revenue building at Rámnagar and a house at Maldhan were commenced. The arrangements for accommodation for subordinates in this Division are well forward.

Ganges Division—

	Rs.
New buildings	3,203
Maintenance	197

Two new houses and quarters for Ranger were built, and two houses completed. The Division is backward in shelter for either Divisional Officer or subordinates, and every effort should be made to push on the work.

Jhansi Division—

	Rs.
New buildings	140
Maintenance	65

A new depôt compound for Jhánsi city was prepared, and three forest guards' quarters constructed.

Lalitpur Division—

	Rs.
New buildings	*Nil.*
Maintenance	399

Existing buildings were repaired.

Banda Division—

	Rs.
New buildings	*Nil.*
Maintenance	71

(c) OTHER WORKS.

52. Details are as follows :—

	Rs.	
Kumaun Division	386	making and clearing wells.
Garhwál Division	190	clearing wells and compounds.
Ganges Division	11	Ditto.
Total ...	597	

CHAPTER IV.

53. The following is a summary of the main facts of the working of the Circle during the past year :—

No.			1889-90.	1888-89.	Increase.	Decrease.
1	Green trees felled	No.	91,810	89,359	2,451	...
2	Yield of above in timber and fuel ...	c. ft.	1,027,974	1,053,960	...	25,986
3	Yield of timber including timber from dry trees,	c. ft.	969,433	1,001,746	...	32,313
4	Value of above	Rs.	377,149	308,755	68,394	...
5	Yield of green timber	c. ft.	685,388	723,901	...	38,513
6	Value of above	Rs.	281,597	219,962	61,635	...
7	Yield of dry timber	c. ft.	284,045	277,845	6,200	...
8	Value of above	Rs.	95,552	88,793	6,759	...
9	Yield of green timber removed by departmental agency.	c. ft.	15,974	13,503	2,471	...
10	Value of above	Rs.	4,146	1,169	2,977	...
11	Yield of green timber removed by exporters...	c. ft.	512,415	410,611	101,804	...
12	Value of above	Rs	258,378	228,420	29,958	...
13	Yield of green timber removed by free grantees and rightholders	c. ft.	156,999	299,787	...	142,788
14	Value of above	Rs.	39,323	28,784	10,539	...
15	Yield of dry timber removed by exporters ...	c. ft.	270,139	261,409	8,730	...
16	Value of above	Rs.	95,458	82,452	13,006	...
17	Yield of dry timber removed by grantees and rightholders	c. ft.	13,906	16,436	...	2,530
18	Value of above	Rs.	3,521	5,856	...	2,335
19	Yield of firewood and charcoal	c. ft	1,719,349	1,705,981	13,368	...
20	Value of above	Rs.	55,270	63,124	...	7,854
21	Yield of fuel removed by departmental agency	c. ft.	173,824	279,588	...	105,764
22	Value of above	Rs.	38,164	45,088	...	6,924
23	Yield of fuel removed by purchasers ...	c. ft.	1,309,933	1,217,149	92,784	...
24	Value of above	Rs	17,499	16,665	834	...
25	Yield of fuel removed by free grantees and rightholders	c. ft.	235,592	209,244	26,348	...
26	Value of above	Rs.	1,995	2,540	...	605
27	Timber sold by departmental agency ...	c. ft.	19,300	14,699	4,607	...
28	Receipts from above	Rs.	4,146	1,169	2,977	...
29	Timber sold direct to purchasers ...	c. ft.	782,554	672,020	110,534	...
30	Receipts from above	Rs.	350,819	310,872	39,947	...
31	Fuel sold by departmental agency ...	c. ft.	176,652	288,004	...	111,352
32	Receipts from above	Rs.	38,164	45,088	...	6,924
33	Fuel sold direct to purchasers ...	c. ft.	1,309,933	939,609	370,324	...
34	Receipts from above	Rs.	17,499	16,665	834	...
35	Bamboos sold	scores	758,809	795,271	...	36,602
36	Value of above	Rs.	94,076	87,691	6,385	...
37	Minor produce and grazing (including drift wood)	Rs.	80,860	73,487	7,382	...
38	Value of other receipts	Rs.	11,976	3,226	8,750	...
39	Yield per square mile in cubic feet of timber and fuel	c. ft.	1,518	1,356	162	...
40	Value of above per square mile	Rs.	244	205	39	...
41	Gross receipts per square mile	Rs.	335	298	37	...
42	Net receipts per square mile	Rs.	190	156	34	...

The following two statements give the description of felling and the agency employed in the extraction of green timber and fuel :—

I.—*Description of felling and yield in green timber and fuel.*

	1889-90.		1888-89.		Increase.		Decrease.	
	No.	c. ft.	No.	c. ft	No.	c. ft.	No.	c. ft.
1 Regeneration (selection fellings).	36,109	685,292	67,869	949,079	...	...	31,760	263,787
2 Regeneration (coppice with standards).	10,670	13,237	6,737	5,031	3,933	8,206	...	...
3 Amelioration improvement fellings	4,810	37,031	208	5,347	4,602	31 684	...	...
4. Amelioration thinnings ..	5,407	72,986	...	...	5,407	72,986	...	...
Total fellings for sylvicultural reasons.	56,996	808,546	74,814	959,457	...	...	17,818	150,911
5. Unclassed fellings (clearances on boundary lines, fire lines, and roads).	34,814	219,428	14,545	94,502	20,269	124,925	...	...
GRAND TOTAL ...	91,810	1,027,974	89,359	1,053,960	2,451	...	...	25,986

II.—*Agency employed in felling and in the export of timber and fuel.*

	1889-90.		1888-89.		Increase.		Decrease	
Government.	No.	c. ft.	No.	c. ft	No.	c. ft.	No.	c. ft.
Regeneration (selection fellings) ...	5,959	70,214	9,995	135,046	..	.	4,036	64,832
Amelioration (thinnings)	1,358	18,506	..	.	1,358	18,506	...	...
Unclassed fellings	2,266	55,050	1,943	51,238	323	3,812	...	...
Total ...	9,583	143,770	11,938	186,284	...	...	2,355	42,514
Purchasers.								
Regeneration (selection fellings) ..	25,725	530,738	33,205	513,267	...	17,471	7,482	...
Regeneration (coppice with standards),	10,670	13,237	6,737	5,031	3,933	8,206	...	...
Amelioration improvement fellings ...	4,810	37,031	208	5,347	4,602	31,684	...	...
Amelioration thinnings	340	1,748	...	...	340	1,748	...	...
Unclassed fellings	25,525	144,101	7,097	36,708	18,428	107,393	...	...
Total ...	67,074	726,855	47,247	560,353	19,827	166,502	...	...
Rightholders and grantees.								
Regeneration (selection fellings) ...	4,427	84,340	24,666	300,766	..	...	20,242	216,426
Amelioration (thinnings)	3,709	52,732	.	..	3,703	52,732	...	...
Unclassed fellings	7,028	20,277	5,500	6,557	1,518	13,720	...	...
Total ...	15,153	157,349	30,174	307,323	...	...	15,021	149,974
GRAND TOTAL ...	91,810	1,027,974	89,359	1,053 960	2,451	...	...	25,986

Regeneration selection fellings took place in all Divisions. Coppice fellings with standards in the Rehar range of the Garhwál Division; amelioration improvement fellings in the Horai block of the Kumaun Division, and amelioration thinnings in the Naini Tal Division; whilst the yield under unclassed fellings is contributed to by all Divisions.

The following statement shows the number of trees cut during the year by species :

	1889-90.		1888-89.		Increase.		Decrease.	
	No.	c. ft.	No.	c. ft.	No.	c. ft.	No.	c. ft.
Sál	33,992	3,26,132	20,893	261,989	13,099	64,143	...	...
Sein	1,905	58,570	2,106	46,002	...	12,568	201	...
Shisham	116	2,316	267	2,549	...	..	151	233
Tún	106	3,686	32	1,226	74	2,460	...	...
Haldu	372	29,987	945	37,359	...	...	573	7,372
Chír	8,644	297,684	14,838	439,144	...	...	6,194	1,41,460
Oak	2,949	154 232	5,098	168,727	...	...	2,149	14,495
Miscellaneous	43,726	155,367	45,180	96,904	...	58,403	1,454	...
Total ...	91,810	1,027,974	89,359	1,053,960	13,173	1,37,574	10,722	1,63,560
Net increase or decrease ...	...	...	...	...	...	...		+2,451 No. -25,986 c.f.

54. The main points made evident by an inspection of the foregoing statements are briefly—

(i.) a slight increase in total number of trees felled, but a large increase in number of sál trees felled owing to good demand for timber and extension of sylvicultural operations in the sub-montane forests ; whilst short demand in the hills by public departments and rightholders reduced the number of chír and oak cut ;

(ii.) a large increase in green timber removed by exporters, owing to great demand and favourable season ;

(iii.) a decrease in amount of timber removed by Government agency and by rightholders, owing to restriction of departmental works and improved check on indents submitted by villagers ;

(iv.) increased export of fuel by purchasers and grantees, owing to the favourable season and to much fuel having been used in lime-burning for forest rest-houses, the fuel for the latter purpose being included under " free grants ;"

(v.) an increase of 12½ per cent. in the value of produce exported per square mile, showing a generally favourable year ;

Full details by Divisions are similarly given in Form No. 54 ; but the following notes may be of interest.

55. **Naini Tal Division.**—The total outturn of green and dry timber and fuel was less than in the preceding year by 1,70,209 cubic feet, which may be sub-divided into timber 105,160 cubic feet and fuel 65,049 cubic feet. In timber the decrease is due to much less having been taken by rightholders, owing to the careful inquiry into indents submitted by the Divisional Officer, and to the fact that trees for sawing were given instead of poles when the extraction of the latter affected the forests injuriously. The decrease in fuel is owing to the Commissariat requiring less than formerly. There is an increase of Rs. 725 under grazing and a falling off of Rs. 348 under other receipts ; the former due to better sales of grass at Ránikhet.

56. **Kumaun Division.**—The total outturn of green and dry timber and fuel was 192,470 cubic feet in excess of 1888-89, being an increase of 40,697 cubic feet of timber and 151,773 cubic feet of fuel. The increase under both heads is owing to a favourable season and ample carriage, and to a good deal of fuel having been used in lime-burning for forest rest-houses. The grazing revenue, as before noted, fell off by nearly 5,000, but this is merely nominal on account of late collections. Other receipts were 30,353 against 20,460 of last year, the increase being due to increased sales of limestone, hides, and kattha ; whilst the failure of the rohli crop reduced the usual

income from that fruit by about one-half. Under bamboo the yield was 44,396 score, valued at Rs. 4,688, against 54,216 score, valued at Rs. 8,011 last year. The demand for bamboos in th Kumaun Division is lessening year by year owing to the superior facilities for carriage in other Divisions, and as there are good stocks in Kumaun a lowering of the rates there and free closure of the forests of other Divisions which may require it will no doubt be beneficial. Amelioration, thinnings, started systematically in Horai, extended over 218 acres, on which area some 6,000 trees chiefly sál, were marked for extraction, and 30,000 cubic feet were exported during the year, bringing in a revenue of about Rs. 4,500. The system has been remarked on in paragraph 13, and its extension will be encouraged, and no doubt better prices will be obtained in future, rendering these sylvicultural operations highly profitable. The operations for kattha were restricted during the year to, approximately, the area which it will be advisable to take up annually in future. The outturn was 604 maunds, and the revenue Rs. 5,390.

57. **Garhwal Division.**—116,021 cubic feet of timber was exported in excess of the outturn of last year; whilst 37,651 cubic feet less fuel was extracted; the figures for the year being timber, 305,106; fuel, 162,638. The increase under timber is due to greater demand amongst merchants, to the extension of the coppice fellings in Rehar, and to more timber being offered on fire lines. The falling off in fuel is of no significance as this item fluctuates greatly from year to year. The revenue under grazing, amounting to Rs. 3,312, shows no difference from the preceding year, whilst other receipts, Rs. 11,480, give an excess of about Rs. 1,500. This is due to increased sale of hides and to the leasing of certain articles of minor forest produce—a system which should be extended as much as possible. Under bamboos 143,006 score realised Rs. 14,507, a decrease of 12,700 score and Rs. 609. This is dependent merely on the backward state of export at the close of the financial year, the price per 100 score was Rs. 10·14 against Rs. 9·70 in 1888-89.

58. The strip fellings in Rehar were continued, the width of strips being reduced to 100 feet and subsequently to 30 feet. In all 20 miles of strips were felled over, giving an area of 137·8 acres; the net revenue was Rs. 37 per acre, but the sale of refuse left on the strips will probably bring this up to Rs. 47 per acre. The sale of refuse on the strips of last year brought in a revenue of Rs. 1,282. The result is satisfactory, and next season a final decision as to the most suitable width of strips can no doubt be arrived at.

59. **Ganges Division.**—The yield of timber, 175,677 cubic feet, is almost identical with that of last year, though there is a slight increase in timber from selection fellings and a corresponding decrease in unclassed fellings. There was a decrease in fuel export of 36,093 cubic feet. Five lakhs twelve thousand eight hundred and seventy-eight scores of bamboos were sold for Rs. 67,412, being a decrease of 25,000 score and an increase of Rs. 6,400. This is due to enhanced prices received at auction sales of blocks. Grazing, Rs. 6,044, against 6,166 last year. Other receipts, Rs. 7,485, show an increase of Rs. 1,637.

60. **Jhansi Division.**—The yield of timber amounted to 3,675 cubic feet, being a decrease for the year of 1,512 cubic feet. Fuel also shows a decrease of 2,198 cubic feet, only 9,280 cubic feet having been exported. Bamboos, 3,730 score, value Rs. 1,293, were sold, showing an increase of 1,651 score and Rs. 456, or an increase of 50 per cent. This is satisfactory, and it is believed that the bamboo trade can be further extended. Grazing shows Rs. 4,903 and other sources, Rs. 616.

61. **Lalitpur Division.**—The outturn of timber was 7,362 cubic feet and of fuel, 2,440 cubic feet, being a decrease of 768 cubic feet and 26,880 cubic feet, respectively, on last year's figures: whilst bamboos, 48,341 scores, valued at Rs. 5,241, show an increase of 20,777 scores, of a value of Rs. 1,827 The grazing dues at Rs. 2,614, and minor produce at Rs. 1,952, show no differences from last year. In the two Divisions of Jhánsi and Lalitpur, though a great falling off in local demand for timber

and fuel from Government forests is apparent, no falling off in the gross revenue has occurred, thanks to the excellent bamboo sales of the year.

62. *Bánda Division.*—The yield of timber was 20,661 cubic feet, or 10,917 cubic feet less than in 1888-89. Fuel shows a decrease of 43,320 cubic feet, only 18,625 cubic feet having being sold. Bamboos, 5,301 score, at Rs. 830, also show a decrease of 1,402 score and Rs. 46. Grazing at Rs. 1,057, and minor produce at Rs. 2,500, show no appreciable difference. The Collector refers these results to the absence of the Forester for three months, during which period he was under suspension.

63. The estimated amount and value of free grants will be found in Appendix D. There is a decrease in value of Rs. 3,274 as against last year.

CHAPTER V.

FINANCIAL RESULTS.

64. The average financial results of the last six years are as below :—

Year.	Square miles.	Gross revenue.	Expenditure.			Net surplus.	Revenue and expenditure per square mile of the circle.					Percentage of gross revenue and expenditure.		
			Conservancy and works.	Establishment.	Total.		Gross revenue.	Conservancy and works.	Establishment.	Total.	Surplus.	Conservancy and works.	Establishment.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs	Rs.
Average of six years from 1883-84 to 1888-89.	1,739	5,06,869	1,44,749	1,15,475	2,60,224	2,46,645	291	83	66	149	142	28	23	51
For 1888-89 ...	1,778	5,32,833	1,38,458	1,15,942	2,54,400	2,78,433	300	78	65	143	156	26	22	48
For 1889-90 ...	1,771	5,02,943	1,43,039	1,13,713	2,56,752	2,36,191	335	81	64	145	190	24	19	43

The results of 1888-89 are also given separately, so as to admit of comparison with the year under record; but until the correct areas of all the forests are known, the figures per square mile of the Circle can be only suggestive. The other figures require no explanation and appear to be satisfactory, for the gross revenue is the highest on record, eclipsing at last the year 1886-87, which has so long been a land mark in the Circle statements, whilst the net surplus is Rs. 37,000 more than in that famous year, and the percentage of expenditure to gross revenue has fallen 4 per cent.

65. The following statement will show the revenue and expenditure by Divisions for the year as compared with 1888-89 :—

Divisions.	Receipts.		Charges.		Surplus.		Deficit.		Percentage of charges on receipts.		Difference.		
	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	Receipts.	Charges	Net results.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direction...	5	1	23,230	26,068	...	...	23,225	26,067	..	...	+ 4	—2,838	+2,842
Naini Tal ..	58,743	66,546	43,411	44,070	15,332	22,476	...	...	73·89	66·2	—7,803	—659	—7,144
Kumaun ...	1,55,733	1,40,144	61,494	59,505	94,239	80,639	...	...	39·4	42·5	+ 15,589	+ 1,989	+ 13,600
Garhwál ...	2,13,366	1,79,231	66,088	67,342	1,47,278	1,11,889	...	...	30 9	37·6	+ 34,135	—1,254	+ 35,389
Ganges ...	1,39,813	1,24,660	45,214	41,087	94,599	82,973	...	...	32·34	33·4	+ 15,153	+ 3,527	+ 11,626
Jhánsi ...	7,679	7,489	5,308	4,302	2,371	3,127	...	...	69 12	58·2	+ 190	+946	—756
Lalitpur ...	11,461	9,328	5,793	7,409	5,668	1,919	...	...	50·53	79·4	+ 2,133	—1,616	+ 3,749
Bánda ...	6,143	5,434	6,214	3,957	...	1,477	71	...	101·15	72·8	+ 709	+ 2,257	—1,548
Total ...	5,02,943	5,32,833	2,56,752	2,54,400	3,59,487	3,04,500	23,296	26,067	43·30	47·7a	+ 60,110	+ 2,352	+ 57,758

The deficit in Bánda being solely due to the purchase of $\frac{55}{45}$ villages on which Rs. 2,700 was expended, other Divisions showing handsome profits on the transactions of the year.

66. A comparative statement of receipts and charges of the year by main heads is given below:—

	Receipts.					Charges.				
	Amount.		Difference in 1889-90.		Budget heads.	Amount.		Difference in 1889-90.		Budget heads.
	1889-90.	1888-89.	Increase.	Decrease		1889-90.	1888-89	Increase.	Decrease	
	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
I.—Departmental operations.	45,021	50,068	...	5,047	I.	32,565	31,489	1,076	...	Debits various to suit each Division (*vide* Form No. 62).
II.—Other heads of revenue.	5,47,322	4,82,165	65,157	...	II. to V.	1,08,940	1,09,087	...	747	
III.—Formation, protection, and improvement of forests.	...	...	...	...	...	1,15,247	1,13,224	2,023	...	
Total ...	5,92,943	5,32,833	65,157	5,047	...	2,50,752	2,54,400	3,099	747	

The decrease in receipts under departmental operations is owing to the almost total stoppage of such works in the submontane Divisions. Some small works were carried out in Kumaun to supply public departments, but the resulting revenue was not credited during the year, the expenditure only being shown. The large increase in receipts without corresponding augmentation of charges is referable to much export during April and May, to brisk demand for timber and other produce during the winter, and to high prices in the plains, resulting in carriage being extremely plentiful, so that carting was well forward at the close of the financial year. The closure of the departmental works and extension of the system of extraction by purchasers is still a matter for congratulation. The market is well established, demand for standing timber quite equal to the supply; in some cases, indeed, as in the Garhwál Division, much in excess of it.

67. The detail by Divisions shows no great variations from last year in the amounts expended under "Formation, improvement and protection," and had it not been for necessary outlay in purchase of land in Bánda, the total under this head would have been less than in 1888-89.

68. The receipts and expenditure of the year tabulated by main budget heads compare as follows :—

RECEIPTS.

Year.	I. Timber and other produce removed from the forests by Government Agency.	II. Timber and other produce removed from the forests by Purchasers.	III. Confiscated drift and waif wood.	IV. Revenue from forests not managed by Government.	V. Miscellaneous receipts.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1889-90	45,621	5,34,053	1,293	...	11,976	5,92,943
1888-89	50,668	4,77,503	1,376	...	3,226	5,32,833
Difference, 1889-90 ... More ...	...	56,490	...	...	8,750	60,110
Difference, 1889-90 ... Less ...	5,047	...	83	...	...	...

EXPENDITURE.

A.—Conservancy and Works.

Year.	I. Timber and other produce removed from forests by Government agency.	II. Timber and other produce removed from forests by consumers or purchasers.	III. Confiscated drift and waif wood.	IV. Revenue from forests not managed by Government agency	V. Rent of leased forests and payments to shareholders.	VI. Live-stock, stores, tools and plant.	VII. Communications and buildings.	VIII. Demarcation, improvement, and extension of forests.	IX. Miscellaneous.	Total.
	Rs.	Rs.			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1889-90	23,312	25,121	...	...	503	9,582	52,425	30,599	1,497	1,43,039
1888-89	22,803	23,758	...	...	610	10,859	52,149	26,071	2,208	1,38,458
Difference, 1889-90. More ...	509	1,363	...	...	..	...	276	4,528		4,581
Difference, 1889-90. Less ...	...	...	...	...	107	1,277	...	...	711	

B.—*Establishments.*

Year.	I. Salaries.	II. Travelling allowances.	III. Contingencies.	Total.
	Rs.	Rs.	Rs.	Rs
1889-90	95,175	13,189	5,349	1,13,713
1888-89	97,885	12,767	5,290	1,15,942
Difference, 1889-90 More	..	422	59	...
Difference, 1889-90 Less	2,710	...	...	2,229

The decrease under receipts I. is referable to less fuel being taken by the Commissariat. The increase under Receipts II, to a good demand, fair weather, and plentiful carriage in the submontane forests; under V, to payment by the Balrámpur estate of 7,700 for an elephant license. Under "Expenditure A," the differences are slight, except under IV, which is owing, as before remarked, to the exceptional outlay on land purchased; whilst the difference under "Expenditure B" is due to payment last year of a portion of Mr. Greig's furlough pay.

69. Form No. 57 shows the value of timber and other produce and of stock in hand at the commencement and close of the year to be as follows:—

	Rs.
Value on 1st April 1889	1,33,408
Value on 31st March 1890	1,49,950
Balance in favour of the year ...	16,542

The balance against the year on account of timber stock amounted to Rs. 530. Except in the plains Divisions there is no timber stock in the Circle.

70. The value of live-stock increased by Rs. 2,662, and that of buildings, tools and plant, by Rs. 14,410, giving a total of Rs. 17,072 in favour of the year. The outstandings due to the Department at commencement and close of the year stood as follows:—

	By Contractor.	*On account of revenue.*
	Rs.	Rs.
On 1st April 1889	9,584	1,248
On 31st March 1890	3,512	4,664
Balance against the year ...	6,072 Balance for the year	3,416

71. The value of the transactions of the year compare with the average of the past four years as under—

	Rs.
Cash surplus	3,36,191
Increased value of stock	16,542
Outstandings due	8,176
Total ...	3,60,909
Average of past four years	2,55,267

CHAPTER VI.

GENERAL REMARKS.

72. It was remarked in paragraph 14 that the quality of bamboo exported had improved, whilst the revenue had not fallen off. A reference to appendix E will show this to be the case, for, although export this season was somewhat backward, much bamboo remaining at the close of the financial year in the forest, the revenue is higher than in any of the seven previous years, except 1886-87, whilst the quantity of bamboo exported is smaller. The sale price per 2,000 stems has increased in eight years from Rs. 7·32 to Rs. 12·40. In the Divisions where partial closure is in force there is an increase in number of stems exported during the working season and in the selling price in spite of increased area under closure. The systems at present in force in the submontane forests vary considerably as to period of rotation, involving, therefore, a variation in the amount of productive area closed, which may be 33, 50 or 66 per cent. of the whole. It appears probable that a closure of one-half the productive area in alternate years, together with the safeguard of prohibiting the extraction of immature shoots and the cutting of stems at undue height from the ground will, save in exceptional cases, meet the requirements both of exporters and of the forests. Exceptional cases would be when entire closure was necessary for a term of years in view of unsatisfactory state of mature growth, or in case of immaturity of standing crop; or when insufficient demand and consequent light cutting rendered closure in alternate years unnecessary. There can be no doubt that thorough cutting over, if well regulated, is beneficial to new growth of the bamboo, and that the large increase in value of material exported is due, not only to improved growth, but also to the opening up of unworked bamboo forests as a result of the closure of those better known.

73. The result of the year's working speaks for itself and render unnecessary any special mention of officers by name; the valuable services rendered to the Department by the Forest Settlement Officers, Mr. J. Oakeshott, C.S., in Garhwál and Mr. Jwala Prasad, C.S., in Bánda, should, however, not pass without warm recognition.

74. Divisional Officers report well of their office establishment, and the Officiating Conservator can testify to the energy and ability of Mr. Sheils in charge of the Head office.

NAINI TAL:
The 4th July 1890.

S. EARDLEY-WILMOT,
Offg. Conservator of Forests, Central Circle.

APPENDICES

AND

ANNUAL STATEMENTS.

APPENDIX A

UNEXECUTED WORK DETAILED IN PLANS OF OPERATIONS FOR 1889-90

Naini Tal Division —

Roads and paths—

Inspection path round upper portion of Batiany forest, a good line has not yet been found

Khairagarh path, not done

Buildings—

Forest house, Gagar, not yet commenced for want of funds

Foresters' quarters in vicinity of Binuk, Dedhuia, Mangoli, Dwarson, not quite finished at the close of the year

Boundaries—

Pillars round village plots which it is proposed to acquire, not done, the question of their acquisition being still unsettled

Survey of boundaries of Seoni and Kuthallekh, Ránikhet protected forests, not done

Working Plans—

Examination of forests of Bellekh and part of Airideo with the object of preparing a scheme of working for them, not done, Airideo forest not transferred to Forest Department at close of the year

Fire Conservancy—

Cutting of fire lines along Machor ridge and the main ridge of Bhatranj, not done, it costs too much to bring fuel from these places

Fire line from Ghingarikhal through Padholi forest, not done

Fencing—

Closure scheme, Ranikhet, closure scheme only sanctioned after close of year, areas not yet fenced, fencing ordered

Kumaun Division —

Roads—

The Jalaban Haldua road, deferred through press of more important work

Export paths near Chuna Khan, not done, but the scheme is to be extended next season

Path up the hill from Degaon, the path was cleared, will be finished next year

Durgaon Shuntra bridle path, postponed for more urgent work

Buildings—

Kathgodam revenue house, was postponed, a more important one being built at Horai instead

Durgaon Ranger's house, no hut built at Durgaon, but a revenue house built at Sarkhet, the house being large enough to accommodate the ranger.

Huts for forest guards at Jubileeganj, Pilapani and Chini, deferred owing to press of more important work

Fencing—

Fencing of sample plots, all arrangements made, will be done next year

Lakhiman Mandi corner, fencing to prevent cattle trespassing, not done as yet

Improvement fellings—

Improvement fellings in the Salami forest, deferred for lack of time

Arrangements for dividing the sal forests of the Division into working circles the question was exhaustively gone into during the Conservator's tour, and definite arrangements made for future work on the system of improvement working circles

Garhwal Division.—

Boundaries—

Boundaries of the Kotah, Chilkia, Dharon and Patli Dún, open to rights forests to be entered in the 4″ maps in divisional office; not yet done.

Surveys and Working Plans—

Accurate surveys of new roads and fire-lines; deferred for lack of time.

Buildings—

Bungalow at Maldhan; not completed within the year, under construction.

Ganges Division.—

Buildings—

Ranger's house at Chila; postponed for want of labour.

Fire Conservancy—

Sona nadi fire-lines; the inner lines of North Sona nadi; not quite completely cleared owing to fault of contractor.

Sample Plots—

In Udeypur; not marked off for lack of time.

Bamboo Working—

Scheme for Kotri; postponed till next year, the plan being received too late for introduction this year.

Selection Fellings—

Rawasan 2 and 6; postponed till 1890-91, more trees having been obtained in Gwalgarh.

Jhánsi Division.—

No unexecuted works.

Lalitpur Division.—

The seeds of the timber trees received from the Saháranpur gardens this year proved unfertile, and a second supply could not be obtained in time to sow.

Bánda Division.—

Lime quarry working.—

The quarries at Chauri were not worked, as the demand for lime was amply met from other quarries.

Roads—

Mánikpur and Kalua roads; repair of these roads not done this year, as the lime quarries at Chauri were not worked.

Buildings—

Erection of a timber shed at Badausa; deferred, no urgency for it at present.

Cutting of timber and bamboos—

Below the estimate; owing to absence of forester who was under suspension for three months.

NAINI TAL:
The 4th July 1890.

S. EARDLEY-WILMOT,
Offg. Conservator of Forests, Central Circle.

Appendix B.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

AREAS CLOSED TO GRAZING IN THE CENTRAL CIRCLE, 1889-90.

Division.	Total area.		Area closed to grazing or only grazed over by exporters' cattle.		Percentage of area of Division closed.
	Acres.	Square miles.	Acres.	Square miles	
NAINI TAL DIVISION.					
Naini Tal Sub-Division	58,692	92	147	4	6·24
Ránikhet Sub-Division	26,294	41	2,590	...	
Total ...	84,986	133	2,737	4	6·24
Kumaon Division	305,689	478	178,310	279	58·33
Garhwál do.	326,825	511	271,628	424	83·11
Ganges do.	224,247	350	203,366	318	90·85
Jhánsi do.	23,923	37	2,040	3	7·89
Lalitpur do.	92,225	144	2,004	3	2·08
Bánda do.	75,454	118	*Nil.*	*Nil.*	*Nil.*
Total ...	1,133,349	1,771	660,085	1,031	58·24

	Acres.	Sq. m.
Reserves	1,014,728	=1,586
Protected	43,167	= 67
Unclassed	75,454	= 118
Total ...	1,133,349	=1,771

NAINI TAL:
Dated the 4th July 1890.

S. EARDLEY-WILMOT,
Offg. Conservator of Forests, Central Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

ABSTRACT RECORD OF THE GROWTH OF SÁL IN SPECIMEN PLOTS IN THE KUMAUN SUB-HIMALAYAN FORESTS.

Year.	Kumaun Forest Division, Plots and year of first observation.								Garhwál Forest Division, plots and year of first observation.								Ganges Forest Division, plots and year of first observation.			
	Lachman Mandi, 1884-85.		Sumnua Thapla, 1884-85.		North Khonani, 1884-85.		Salani, 1887-88.		Amtanola, 1884-85.		Raninagal, 1887-88.		Dhikala, 1887-88.		Domunda, 1887-88.		Andher Majhera, 1888-89.		Chaukhamb, 1888-89.	
	Thinned area.	Unthinned area	Thinned area.	Unthinned area	Thinned area.	Unthinned area	Thinned area.	Unthinned area.	Thinned area.	Unthinned area	Thinned area	Unthinned area	Thinned area.	Unthinned area.	Thinned area	Unthinned area	Thinned area.	Unthinned area	Thinned area.	Unthinned area.
	Acres and number of trees. 2—114	Acres and number of trees. ½—71	Acres and number of trees. 2—115	Acres and number of trees. ½—55	Acres and number of trees. ...	Acres and number of trees 1—74	Acres and number of trees ...	Acres and number of trees 1—50	Acres and number of trees. 2—112	Acres and number of trees ½—64	Acres and number of trees 2—131	Acres and number of trees ½ - 79	Acres and number of trees. 2—160	Acres and number of trees. ½—191	Acres and number of trees 2—157	Acres and number of trees. ½—163	Acres and number of trees 2—192	Acres and number of trees ½—96	Acres and number of trees. 2—244	Acres and number of trees ½—100
	Increase, inches.	Increase, inches.	Increase, inches.	Increase, inches.	Increase. inches.	Increase inches.	Increase, inches	Increase, inches.	Increase, inches.	Increase, inches.	Increase, inches.	Increase, inches.	Increase, inches.	Increase, inches.	Increase inches.	Increase. inches.	Increase, inches.	Increase, inches.	Increase. inches.	Increase. inches.
1884-85 ...	·83	·42	61	·34	...	...	...	...	·78	·37	...	...	...	...	...	...	...	...	...	...
1885-86 ...	1·08	·45	71	·41	...	...	...	...	·98	·35	...	...	...	...	...	...	...	...	...	...
1886-87 ...	·68	·28	·43	·28	...	..	...	...	·54	·38	...	...	...	...	...	...	...	...	...	..
1887-88 ...	·91	·61	·84	·61	...	·47	...	·24	·90	·20	·90	·40	·80	·50	·60	·50	...	...	...	...
1888-89 ...	·85	·67	·81	·35	...	*05	...	*02	1·03	·67	1·15	·72	1 83	52	·90	·50	...	...	...	...
1889-90 ...	·94	·23	·71	·33	...	·61	...	·23	·54	·18	1·07	·79	1 24	·74	·78	·29	·59	·47	·59	·29
Average increase in the various plots per tree.	·88	·44	·68	·38	...	34	...	·15	·79	·36	1·04	·63	1·12	·58	·76	·43	·59	·47	·59	·29

**Decreases.

NAINI TAL:
The 4th July 1890.

S. EARDLEY-WILMOT,
Offg. Conservator of Forests, Central Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

PRODUCE REMOVED BY FREE GRANTEES AND RIGHT HOLDERS, 1889-90.

Name of grantee.	Description of produce.	Naini Tal Division.		Kumaun Division.		Garhwál Division.		Ganges Division.		Jhánsi Division		Lalitpur Division.		Bánda Division.		Total of each class of produce.	
		Amount.	Value.	Amount.	Value.	Amount.	Value.	Amount.	Value.	Amount	Value	Amount.	Value.	Amount	Value.	Amount.	Value.
		C. ft.	Rs.	C. ft.	Rs.	C ft.	Rs.	C. ft.	Rs.	C. ft.	Rs.	C. ft.	Rs	C. ft.	Rs.	C. ft.	Rs.
RIGHT HOLDERS.	I.—Timber	105,882	18,181	26,079	9,571	12,060	3,660	1,679	980	...	...	...	..	...	...	145,700	32,392
	II.—Firewood	17,250	719	835,666	8,500	378,855	3,946	128,055	1,334	...	...	190	10	...	...	1,360,016	14,509
	III.—Minor forest produce, such as bamboos, bark, fruit and limestone.	...	271	...	10,000	...	5,000	...	797	...	..	...	3	...	...	...	16,071
	IV.—Grass, grazing and leaf fodder,	...	6,462	...	11,000	...	10,000	...	3,108	...	...	...	...	...	...	...	30,570
	V.—Branches, leaves and vegetable mould for manure.	...	81	...	...	...	...	...	...	...	...	...	...	...	...	...	81
	Total ...	123,132	25,714	861.745	39,071	390,915	22,606	129,734	6,219	...	...	190	13	..	...	1,505,716	93,623
CONCESSIONS BY GRANT OF LOCAL GOVERNMENT.	I—Timber	...	...	6,229	4,672	...	...	...	...	...	...	...	...	...	...	6,229	4,672
	II.—Firewood	...	...	...		...	...	...	...	...	...	...	...	...	...	...	...
	III —Minor forest produce, such as bamboos, bark, fruit and limestone.	...	...	5,000		...	...	...	...	...	...	...	...	...	...	5,000	425
	IV.—Grass, grazing and leaf fodder,	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...
	V.—Branches, leaves and vegetable mould for manure.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	.	...	11,229	5,097	...	...	...	...	...	...	...	...	...	...	11,229	5,097
FREE GRANTS UNDER EXECUTIVE ORDERS.	I. Timber	2,104	361	3,624	1,854	8,405	2,494	3,197	1,071	...	...	1,246	200	...	...	18,576	5,980
	II —Firewood	...	...	54,240	452	...	...	...	...	160	8	...	...	...	...	54,400	460
	III.—Minor forest produce, such as bamboos, bark, fruit and limestone.	...	...	...	323	...	2	...	...	...	...	...	20	...	...	...	345
	IV.—Grass, grazing and leaf fodder,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	V.—Branches, leaves and vegetable mould for manure.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	2,104	361	57,864	2,629	8,405	2,496	3,197	1,071	160	8	1,246	220	...	...	72,976	6,785
	GRAND TOTAL ...	125,236	26,075	930,838	46,797	399,320	25,102	132,931	7,290	160	8	1,436	233		..	1,589.921	105,505

ABSTRACT FOR THE CIRCLE.

Description of produce.	To right holders.		Under concessions granted by Local Government.		By free grants under executive orders		Total of each kind of produce.	
	Amount.	Value.	Amount	Value.	Amount.	Value.	Amount	Value.
	C. ft.	Rs.	C ft.	Rs	C. ft	Rs.	C. ft.	Rs.
I.—Timber	1,45,700	32,392	6,229	4,672	18,576	5,980	1,70,505	43,044
II.—Firewood	13,60,016	14,509	...	...	54,400	460	14,14,416	14,969
III.—Minor forest produce, such as bamboos, bark, fruit and limestone	...	16,071	5,000	425	...	345	5,000	16,841
IV.—Grass, grazing and leaf fodder	...	30,570	...	...	...	...	...	30,570
V.—Branches, leaves and vegetable mould for manure	...	81	...	...	...	...	...	81
GRAND TOTAL ...	15,05,716	93,623	11,229	5,097	72,976	6,785	1,589,921	105,505

NAINI TAL:
The 4th July 1890.

S. EARDLEY WILMOT,
Offg. Conservator of Forests, Central Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

STATEMENT SHOWING YIELD OF BAMBOOS FOR THE EIGHT YEARS 1882-83 TO 1889-90.

Division.	1882-83.		1883-84.		1884-85.		1885-86.		1886-87.		1887-88.		1888-89.		1889-90.		Total.	
	Scores.	Value	Scores.	Value.	Scores	Value.	Scores	Value.	Scores.	Value.	Scores.	Value	Scores.	Value.	Scores.	Value.	Scores.	Value.
		Rs		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Naini Tal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	288	75	288	75
Kumaun	111,663	9,480	212,940	15,244	193,543	17,520	94,099	8,872	102,740	9,490	85,936	8,081	60,869	5,988	44,396	4,688	906,195	79,363
Garhwál	350,188	23,859	375,432	27,252	202,832	17,197	232,148	22,225	255,866	25,173	185,487	18,396	155,714	15,116	143,006	14,507	1,900,673	1,63,725
Ganges	479,253	35,572	471,465	36,862	374,165	28,399	419,903	40,306	654,286	61,550	620,159	61,080	541,924	61,437	512,878	67,412	4,074,033	3,92,623
Jhánsi	367	73	458	96	1,004	232	1,090	275	1,960	638	905	415	2,079	887	3,730	1,293	11,593	3,859
Lalitpur	71,874	5,501	56,937	4,448	39,606	3,459	42,150	4,212	40,308	4,881	36,031	4,397	27,564	3,414	48,341	5,241	362,811	35,553
Bánda	1,607	247	1,640	373	1,804	462	2,115	376	3,555	711	2,938	541	6,703	876	5,301	830	25,663	4,416
Total ...	1,014,952	74,732	1,118,881	84,275	812,954	67,269	791,505	76,266	1,058,715	1,02,443	931,456	92,915	794,853	87,668	757,940	94,046	7,281,256	679,614
Average rate per 100 score ...	Rs. 7 32		Rs. 7·39		Rs. 8 09		Rs. 9·02		Rs. 9·67		Rs. 9 97		Rs. 11·03		Rs. 12 40		Rs. 9 33	

Export for two working seasons, 1888-89 and 1889-90 under partial closure systems.

		1888-89.			1889-90.		
		Scores.	Amount. Rs.	Average rate. Rs.	Scores.	Amount. Rs.	Average rate. Rs
	Kumaun	55,754	5,481	9·83	43,435	4,678	10 77
	Garhwál	139,316	13,410	9 62	173,082	17,079	9·87
NAINI TAL:	Ganges	446,276	51,202	11·47	554,275	57,522	10·38
The 4th July 1890	Total ...	641,346	70,093	10 92	770,792	79,279	10·28

S. EARDLEY-WILMOT,

Offg Conservator of Forests, Central Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

Form No. 49.

AREA OF RESERVED FORESTS, 1889-90.

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.		Number and date of Notification of addition or transfer.	Remarks.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles		
Naini Tal.	China ...	Kumaun ...	Naini Tal reserve ... Kota ... Dechauri ... Fatehpur ...	14,849	23	(a)718	...	15,567	24	...	(a) Revision of area.
	Hinnan ...	Ditto ...	Ditto Gagar and Ninglat ...	...	...	*23,680	...	23,680	37	* Notification No. 201F, 574—36 dated 24th March 1890.	Excluded *nil*, added 24,852 acres.
	Ranikhet ...	Ditto ...	Ranikhet reserve	4,480	7	(a)454	...	4,934	8		
			Total ...	19,329	30	24,852	...	44,181	69		
Kumaun.	Nihal ...	Kumaun ...	I.—Dabka	62,080	97	...	8,183	7,141	11		(a) (b) Revision of area.
		Ditto ...	II.—Dechauri					17,754	28		
		Ditto ...	III.—Fatehpur					29,002	45		
	Chaubhainsi,	Ditto ...	IV.—Chakhata	65,606	103	...	5,722	59,884	93		
		Ditto ...	V.—Horai	8,960	14	...	4,560	4,400	7		* This area also includes 14 acres disafforested under G. O. No. 157F, 92—11 dated 10th March 1890.
		Ditto ...	VI.—Chaubhainsi	147,520	230	...	*15,287	132,233	207		
		Ditto ...	VII.—Jaunla Sal	43,520	68	...	812	(b)42,708	67		
	Talla Des ...	Ditto ...	VIII.—Kalonia	4,320	7	...	34	4,286	7		
		Ditto ...	IX.—Chini	4,640	7	...	253	4,387	7		
		Ditto ...	X.—Sarda Islands	5,440	8	...	1,949	3,491	5		
		Ditto ...	XI.—Chandni	320	1	(a)83	...	403	1		
			Total ...	342,406	535	83	36,800	305,689	478		Acres. Excluded ... 36,800 Added ... 83 Balance less... 36,717
Garhwál.	Patli Dún ...	Garhwál ...	I.—Palain	24,640	38	14,356	...	38,996	61		(a) (b) Revision of area.
		Ditto ...	II.—Patli Dún	152,000	238	...	(b)18,442	133,558	209		
		Ditto ...	III.—Kartia	800	1	47	...	847	1		
	Chilkia Kota,	Kumaun ...	IV.—Chilkia	80,467	126	2,218	(a) ...	82,685	129		
		Ditto ...	V.—Kota	35,200	55	7,822	...	43,022	67		Acres. Added ... 25,504 Excluded ... 18,442 Balance more... 7,062
		Ditto ...	VI.—Garhibulchand	10,937	17	161	...	11,098	17		
	Dhara ...	Bijnor ...	VII.—Behar	15,719	25	900	...	16,619	26		
			Total ...	319,763	500	25,504	18,442	326,825	511		Excluded ... 55,242 Added ... 50,439 Balance less ... 4,803

FORESTS DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE. **Form No. 49.**

AREA OF RESERVED FORESTS, 1889-90.—(*concluded*).

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.		Number and date of Notification of addition or transfer.	Remarks.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Aquivalent in square miles.		
Ganges,	Kohtri Dún, Sona nadi ...	Garhwál ...	I.—Kotri Dún ... Kotri Dún ...	58,240	91	2,095	(a) ..	92,975	145	...	(a) (a) (b) Revision of area.
			Sona nadi ...	32,640	51						
	Udepur ...	...	II.—Udepur	34,240	54	275 (a)	...	34,515	54	...	Acres. Added ... 2,370 Excluded ... 1,240
	Gori ...	Garhwál and Bijnor.	III.—Gori ... Gori ...	56,320	88	...	1,240 (b)	96,757	151		Balance more... 1,130
			Chandi ...	41,677	65						
			Total ...	223,117	349	2,370	1,240	224,247	350		
Jháns ..	Jhánsi ...	Jhánsi ...	Jhánsi	10,543	17	†12	...	10,555	17	† Notification No. 321F/670—8, dated 26th April 1889.	
			Mau	6,011	9	...	...	6,011	9		
			Garotha	5,127	8	...	...	5,127	8		
			Moth	2,230	3	...	...	2,230	3		
			Total ..	23,911	37	12	...	23,923	37		
Lalitpur ..	Lalitpur ...	Lalitpur ...	Lalitpur	290	...	...	...	290	...		
			Bansi	4,667	7	...	...	4,667	7		
			Talbehat	9,290	15	..	...	9,290	15		
			Balabehat	30,173	47	...	...	30,173	47		
			Banjur	4,745	7	...	...	4,745	7		
			Mahroni	1,283	2	...	...	1,283	2		
			Maraura	39,415	62	...	...	39,415	62		
			Total ...	89,863	140	...	...	89,863	140		Acres. Excluded ... 56,482 Added ... 52,821 Balance less .. 3,661
			GRAND TOTAL FOR THE CIRCLE ...	1,018,389	1,591	52,821	56,482	1,014,728	1,586		

NAINI TAL:
The 4th July 1890.

S. EARDLEY-WILMOT,
Offg. Conservator of Forests, Central Circle.

Form No. 49

FOREST DEPARTMENT, N.-W PROVINCES AND OUDH, CENTRAL CIRCLE.

AREA OF PROTECTED FORESTS, 1889-90.

Division or range.	Civil district or territory.	Name of forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of Notification of addition, or transfer.	Remarks.
Naini Tal Division.										
Naini Tal Sub-Division. China	Kumaun	China	20,136	31	...	(a)691	19,445	30	...	(a) Revision of area.
		Budlakot								
		Nalena								
		Bhawali								
		Jakh								
		Larea Kanta								
		Kuria								
		Total	20,136	31	...	691	19,445	30		
Rânikhet Sub-Division. Siuni		Machor	211	...	...	65	146	...		
		Bhatronj	5,760	9	68	...	5,828	9		
		Siuni	4,480	7	...	48	4,432	7		
		Siun	640	1	60	...	700	1		
		Bellekh	640	1	302	...	942	1		All additions and exclusions are on account of revision of area.
Rânikhet		Kathallekh	1,920	3	...	108	1,812	3	...	
		Gainadeoli	1,280	2	...	391	889	1		
		Karchuli	203	...	10	...	213	...		
		Chillianso	640	1	...	10	630	1		
		Chaubattia	1,280	2	...	72	1,208	2		
		Padholi	640	1	317	...	957	2		
		Dwarson	1,920	3	...	491	1,519	2		
		Deolikhet	25	...	...	5	20	...		
		Siahi Devi	1,920	3	144	...	2,064	3		
		Total	21,559	34	901	1,100	21,360	33		
		Total Naini Tal Division	41,695	65	901	1,791	40,805	64		
Lalitpur	Lalitpur	Talbehat	2,362	4	...	...	2,362	4		
		GRAND TOTAL OF CIRCLE	44,057	69	901	1,791	43,167	67		

Acres.
Excluded ... 1,791
Added ... 901
Balance less... 890

Acres.
Excluded ... 1,791
Added ... 901
Balance less... 890

NAINI TAL
The 4th July 1890

S. EARDLEY-WILMOT,
Offg Conservator of Forests, Central Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH CENTRAL CIRCLE.

Form No. 49.

AREA OF BÁNDA FOREST, 1889-90—(UNCLASSED STATE FORESTS).

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.		Number and date of notification of addition or transfer	Remarks.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
			I.—Ranipur-Kalianpur.								
Bánda ...	...	Bánda district,	1. Mau	385·53	...	...	...	385·53	...		
			2 Unchadih	413·88	...	...	...	413 88	...		
			3. Sakrawan	644 80	...	...	...	644·80	...		
			4. Ránipur-Kalianpur ...	2,697 84	...	...	...	2,697·84	...		
			5. Mamaniya or Katauta...	2,250 24	...	...	...	2,250 24	...		
			6 Gadurha	221 66	...	...	...	221·66	...		
			7. Uldan	714·02	...	...	...	714·02	...		
			8. Rajuhan	4,618 80	...	...	...	4,618·80	...		
			9 Deori	4,273 31	...	...	...	4,273 31	...		
			*10. Nihi	2,109·61	...	...	...	2,109·61	...		
			*11. Maholi	948·76	...	...	...	948·76	...		
			*12. Kalianpur	2,670·66	...	...	...	2,670·66	...		
			Total ...	21,949·11	34	...	...	21,949·11	34		
			II.—Chauri-Donda.								
Ditto ...	...	Ditto ...	*13. Karauhan	728 43	...	...	...	728 43	...		
			*14. Sikapur-Chit Ghati	69 43	...	...	...	69·43	...		
			15 Jaro or Jaro muáfi	1,139 94	...	...	...	1,139 94	...		
			16. Chauri	4,036 70	...	...	...	4,036·70	...		
			17. Chulha	1,502 38	...	...	...	1,502 38	...		
			18. Parasin or Kulmar Parasin ...	3,623 30	...	...	...	3,623 30	...		
			19. Donda	5,416 14	...	...	...	5.416·14	...		
			Total ...	16,516 32	26	...	...	16.516 32	26		
			III.—Manikpur.								
Ditto ...	...	Ditto ...	20. Chulhi	1,621 92	...	...	...	1,621·92	...		
			*21 Mahál Balkishen of Chulhi village...	26 25	...	...	...	26·25	...		
			*22 Mahál Mukhramgir of Chulhi village,	13·00	...	...	...	13 00	...		
			23. Ambha	2,242 77	...	...	...	2,242 77	...		
			24. Karkapadri or Pandria ...	730·93	...	...	...	730 93	...		
			25. Chheria Kalan	1,237·83	...	...	...	1,237 83	...		
			26. Amchor Narwa	4,216·66	...	...	...	4,216·66	...		
			27. Rukma khurd	132·62	...	...	...	132 62	...		
			28. Area outside forest line .	716·00	...	...	...	716·00	...		
			Total ..	10,937 98	17	.	...	10,937·98	17		

					IV.—Tikaria.						
Bánda ...	...	Bánda district,	29. Bhenda or Bhera ...		777·96	...	...	..	777 96	...
			*30. Dadri muáfi ...		4,697·00	...	...	..	4.697·00	...
			*31. Tikaria Jamanbai ...		2,892·39	...	...	...	2,892·39	...
			*32. Gursarai		908·43	...	...	...	908·43	...
			*33. Rukma Buzurg ...		1,978 21	...	...	...	1,978·21	..
			*34. Marian Panwari or Mandayan Panwari.		1,885·68	...	...	...	1,885·68	...
				Total ...	13,139·67	21	...	...	13,139·67	21
					V.—Matdar.					
Ditto ..	...	Ditto ...	35. Matdar	...	6,729·10	10	...	...	6,729·10	10
				Total ...	6,729 10	10	...	...	6,729·10	10
					VI.—Koluwa.					
Ditto ...	...	Ditto ...	36. Koluwa	...	6,182·00	10	...	...	6,182·00	10
				Total ...	6,182·00	10	...	...	6,182·00	10
				GRAND TOTAL ...	75,454·18	118	...	...	75,454·18	118

* Village areas administered under the $\frac{55}{45}$ arrangement.

	Acres.
Total area Government villages	56,526·33
Ditto $\frac{55}{45}$ villages	18,927 85
Total area ...	75,454·18=118 square miles.

DATED NAINI TAL:
The 4th July 1890.

S. EARDLEY-WILMOT,
Offg. Conservator of Forests, Central Circle.

Form No. 50.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

REGISTER OF BREACHES OF FOREST RULES DURING 1889-90.

Forest Division.	Cases pending from 1888-89.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission, or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Naini Tal Division.					I.—Prosecutions in Courts of Law.									
					By the Assistant Commissioner, Naini Tal.									
Naini Tal	...	1	1	...	1	3	3	2	3	...	...	2	3	1
Bánikhet	...	...	2	...	...	2	2	...	...	1	1	1	1	1
Total, Naini Tal ...	...	1	3	...	1	5	5	2	3	1	1	3	4	2 4 persons.
					By the Magistrate of the Bhábar.									
Kumaun Division	...	...	...	...	1	1	1	1	1	...	...	1	1	...
					By the Magistrate of the Tarái.									
	...	...	...	...	1	1	1	1	1	...	...	1	1	...
Total, Kumaun ...	...	...	...	...	2	2	2	2	2	...	...	2	2	...
					By Magistrate, Garhwál.									
Garhwál Division	1	...	...	...	...	...	1	...	...	1	13	1	13	...
					By Magistrate, Bhábar.									
	...	...	..	...	5	5	5	2	2	...	...	2	2	3 cases 9 men pending.
					By Magistrate, Bijnor.									
	...	...	...	...	1	1	1	1	2	...	...	1	2	
Total, Garhwál ...	1	...	...	...	6	6	7	3	4	1	13	4	17	...

Ganges Division.									*Nil.*							
Jhánsi Division	...	...	10	...	...	10	10	10	12	...	1	10	13	...		
Lalitpur Division	...	...	4	...	...	4	4	1	2	3	3	4	5	...		
Bánda Division	...	...	4	...	...	4	4	4	8	...	...	4	8	...		
Total, I ...	1	1	21	...	9	31	32	22	31	5	18	27	49	5		
Naini Tal Division.					II.—Cases compounded under Section 67 of the Forest Act.											
Naini Tal	...	4	238	...	...	242	242	237	307	5	8	242	315	...		
Bánikhet	...	2	67	4	...	73	73	71	160	2	2	73	162	...		
Total ...	...	6	305	4	...	315	315	308	467	7	10	315	477	...		
Kumaun Division	...	2	85	2	4	93	93	90	131	3	3	93	134	...		
Garhwál Division	...	..	35	...	19	54	54	54	96	...	...	54	96	...		
Ganges Division	...	...	26	...	45	71	71	66	111	...	...	66	111	Cases 5 persons 13		
Jhánsi Division					*Nil.*											
Lalitpur Division					*Nil.*											
Bánda Division ...					*Nil.*											
Total, II ...	...	8	451	6	68	533	533	518	805	10	13	528	818	Cases 5		
GRAND TOTAL, I AND II ...	1	9	472	6	77	564	565	540	836	15	41	555	867	10		

NAINI TAL:
The 4th July 1890.

S EARDLEY-WILMOT,
Offg. Conservator of Forests, Central Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON 1890—TO ACCOMPANY REPORT FOR 1889-90.

Division.	Forest Tracts.	Year in which protection commenced	Area actually protected up to 30th June 1889.	During dry season of 1890.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
	I.—Areas under Special Protection.						Rs.	
Naini Tal Division—								
Naini Tal Sub-Division.	Naini Tal protected forest	1876	18,245	19,445	627	18,818	343	The column "Area actually protected up to 30th June 1889" shows the figures returned in last year's Form No. 51, but revised according to corrected areas furnished by the Forest Survey Branch during the year, the revised areas being entered in the column "Attempted, 1890." The comparison is therefore valid. This remark applies to every division, except Jhánsi and Lalitpur, for which revised figures are not yet available.
	„ reserve	1886	15,009	15,567	20	15,547	164	
	Gagar-Ninglat reserve	1888	11,652	12,160	1,182	10,978	176	
	Total	...	44,906	47,172	1,829	45,343	683	
Bánikhet Sub-Division.	Bánikhet reserve	1874	4,908	4,934	25	4,909	288	
	Padholi protected	1882	934	957	...	957	18	
	Chaubattia	1882	1,208	1,208	...	1,208	17	
	Karchuli	1885	213	213	...	213	7	
	Ganiadeoli	1878	875	889	...	889	33	
	Kathalekh	1878	1,812	1,812	323	1,489	67	
	Siuni	1880	4,432	4,432	280	4,152	116	
	Siun	1885	700	700	60	640	13	
	Dwarson	1888	1,519	1,519	5	1,514	11	
	Bellekh	1888	942	942	...	942	13	
	Bhatronj	1868	2,500	2,500	15	2,485	19	
	Chilianao	1884	596	630	36	594	21	
	Total	...	20,639	20,736	744	19,992	623	
	Total, I	...	65,545	67,908	2,573	65,335	1,306	
	II.—Areas protected by the Ordinary Establishment.							
Bánikhet Sub-Division.	Machor protected forest	1888	98	146	...	146	...	
	Siahi Devi ditto	1888	2,064	2,064	...	2,064	...	
	Total, II	...	2,162	2,210	...	2,210		
	Total, Naini Tal Division	...	67,707	70,118	2,573	67,545	1,306	

	Dechauri range.								
Kumaun Division,	Sonani Block	1890	*Nil.*	3,036	1,517	1,519	30		
	Fatehpur range.								
	Bhakra	1888	2,391	2,391	...	2,391	147		
	Mona block	1890	...	4,126	84	4,042			
	Chaubhainsi range.								
	Nindhaur	1882	24,498	25,305	2,915	22,390	2,037		
	Karakot	1890	...	3,444	...	3,444			
	Jaunia Lal beat	1876	7,592	7,592	202	7,390			
	Chunmged	1890	...	5,313	...	5,313			
	Hatgad	1890	...	3,858	20	3,838			
	Chanua Dhunga	1890	...	4,935	...	4,935			
	Chakhata range.								
	Horai	1876	2,790	4,476	...	4,476	489		
	Lakhman Mandi	1883	1,049	2,049	...	2,049			
	Jampokhra	1890	...	1,109	...	1,109			
	Patrani	1890	...	2,730	...	2,730			
	Asni	1890	...	2,415	...	2,415			
	Kalonia range.								
	Sarra Valley	1889	2,995	7,262	...	7,262	1,094		
	Dulagad	1887	5,301	5,301	..	5,301			
	Birgot	1890	...	4,515	...	4,515			
	Bhargot	1890	...	6,090	...	6,090			
	Laibar	1890	...	8,683	...	8,683			
	Kumia	1890	...	5,796	...	5,796			
	Sudlimat	1890	...	4,305	...	4,305			
	Sarda range.								
	Solani	1876	403	403	...	403	331		
	Dangaona	1890	...	825	28	797			
	Naghan	1890	...	686	569	117			
	Bansa	1890	...	803	...	803			
	Khapkot	1890	...	433	...	433			
	Khamari	1890	...	610	...	610			
	Jariakhal North	1890	...	1,215	400	815			
	Ditto South	1890	...	1,100	...	1,100			
	Total, Kúmaun Division	...	47,019	120,806	5,735	115,071	4,128		
Garhwál Division,	North Patli Dún (part of Patli Dún forest block No. II)	1878	45,692	45,692	...	45,692	2,040		
	South Patli Dún (ditto ditto)	1873	24,588	24,588	...	24,588	2,382		
	Chilkia (part of Chilkia forest block No. IV)	1872	50,620	50,620	21	50,599	1,883		
	Kotah (part of Kotah forest block No. V)	1877	36,178	36,178	...	36,178	1,191		
	Garhi Bulchand (ditto No. VI)	1877	8,996	8,996	2,968	6,028	732		
	Rehar (part of Rehar forest block No. VII)	1881	11,531	11,531	669	10,862	1,000		
	Kailkhur (part of Dabka forest block)	1888	4,104	4,104	...	4,104	53		
	Total Garhwál Division	...	181,709	181,709	3,658	178,051	9,281		

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON 1890—TO ACCOMPANY REPORT FOR 1889-90.

Division.	Forest Tracts.	Year in which protection commenced.	Area actually protected up to 30th June 1889.	During dry season of 1890.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
				Gori range.			Rs.	
Ganges Division —*(concluded)*.	Kunaun	1887	8,131	8,131	...	8,131	803	
	Kauria	1881	2,169	2,169	...	2,169		
	Andher Majhera		5,582	5,582	...	5,582		
	Jogichaur		5,315	6,923	...	6,923		
	Hazara		2,095	2,174	...	2,174		
				Udepur range.				
	Rawasan and Luni	1890	...	3,254	...	3,254	321	
	Gwalgarh and Malan	1887	3,435	5,064	...	5,064		
	Sukrao	1882	1,112	1,112	...	1,112		
				Kohtri range.				
	Dabina	1886	10,042	11,082	112	10,970	1,846	
	South Kohtri	1889	3,596	3,596	...	3,596		
	North Kohtri	1890	...	8,100	...	8,100		
	Mandalti	1888	17,762	17,762	3,666	14,096		
				Sona Nadi range.				
	Shishamkhata	1877	1,847	1,847	...	1,847	714	
	North Sona Nadi	1889	12,920	12,920	8,836	4,084		
	Total, Ganges Division ...	...	74,006	89,716	12,614	77,102	3,684	
				I.—Areas under Special Protection, Jhansi Pargana.				
	Dhukwan and Sukwan blocks	1874	1,483	1,483	...	1,483	298	
	Bajna block	1888	457	457	...	457		
	Total, I ...	...	1,940	1,940	...	1,940	298	

Jhánsi Division...	II.—Areas protected by the Ordinary Establishment with the aid of villagers, Jhansi pargana.								
	Remaining forest blocks	1888	8,613	8,615	11	8,604	...		
	Mau pargana forests	...	6,035	6,011	...	6,011	...		
	Garotha ditto	...	5,127	5 127	...	5,127	...		
	Moth ditto	...	2,230	2,230	...	2,230	...		
	Total, II ...	...	22,005	21,983	11	21,972	...		
	Total, Jhánsi Division ...	...	23,945	23,923	11	23,912	298		
Lalitpur Division, II a	I.—Areas under special protection, Lalitpur pargana.								
	Kachnoda forests	1888	190	190	...	190			
	Ssirwans	1888	100	100	...	100			
	Balabehat pargana.								100
	Deogarh	1875	998	998	...	998			
	Garauli		751	751	...	751			
	Total, I ...	...	2,039	2,039	...	2,039	100		
	II.—Areas protected from fire by the ordinary establishment.								
	Talbehat forests	1888	11,652	11,652					
	Bansi	...	4,665	4,667					
	Banpur	...	4,745	4,745					
	Balabehat forest.				6,827	17,037	...		
	The balance after deducting walled portion of Deogarh, after allowing for 41 acres burnt in clearing fire line outside wall, ...		2,797	2,800					
	Total, II ...	...	23,859	23,864	6,827	17,037	...		
	Total, Lalitpur Division ...	...	25,898	25,903	6,827	19,076	100		
	Total, I Forests ...	...	372,258	464,118	24,580	439,538	18,797		
	Total, II Forests ...	...	48,026	48,057	6,838	41,219	...		
	GRAND TOTAL FOR THE CIRCLE ...	...	420,284	512,175	31,418	480,757	18,797		

NOTE.—This form is for the dry season, and not for the financial year, and therefore the date up to which expenditure is included must be filled in to suit the circumstances of each Circle.

NAINI TAL:
The 4th July 1890.

S. EARDLEY-WILMOT
Offg. Conservator of Forests, Central Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

Form No. 52.

AREA OF PLANTATIONS, 1889-90.

Division.	Name of Plantation.	Area in acres. On 1st April 1889.	Added during the year.	Excluded during the year.	Area on 31st March 1890.	Receipts— Of the year. Rs.	Charges— Of the year. Rs.	Remarks.
Naini Tal Division.			**Regular plantations.**					
Ránikhet Sub-Division ...	Ránikhet Nursery	50	...	...	50	1,668	1,263	
	Total	50	...	...	50	1,668	1,263	
			Cultural operations.					
Naini Tal Sub-Division ...	Jhabar	147	...	...	147	...	...	Of this area about 50 acres are stocked with coppice and natural seedlings.
	China	96	...	...	96	...	94	
	Kahla	39	...	...	39	...	...	
	Nairwari	43	...	...	43	...	...	Walnut and ash.
	Deopata	47	...	...	47	...	...	Deodar, walnut, ash and kharsu.
	Kiladhunga	25	...	...	25	...	...	Deodar, walnut and ash.
	Bhadli	33	...	...	33	...	...	Ash and banj.
	Maulani	49	...	...	49	...	...	Ash and walnut, fruit trees.
	Chatrani	5	...	...	5	...	...	Banj and chír.
	Various other plantations imperfectly stocked or success uncertain.	...	...	...	...	...	...	Area not known.
	Total, Naini Tal Sub-Division ...	484	...	...	484	...	94	
Ránikhet Sub-Division ...	Jakhdeo Upper	367	...	...	367	...	181	Area approximate.
	„ Lower							
	Garkhet							
	Jainoli							
	Dharmikhet							
	Ghingarukhal							
	Various other plantations imperfectly stocked, incomplete or success uncertain.	...	...	...	...	...	234	Area not known.
	Total, Ránikhet Sub-Division ...	367	...	...	367	...	415	
	Grand Total, Naini Tal Division ...	851	...	...	851	...	509	

Kumaun Division ...	Haldwani and Chorgalia	7	...	...	7	...	243	Forest trees of various kinds.
Garhwál Division ...	Chopra plantation	30	5	...	35	...	9	
	Petty cultural operations at Ramnagar, Mohan, Rampur and Leti.	...	...	...	...	...	184	
	Total, Garhwál Division ...	30	5	...	35	...	193	
Ganges Division ...	Chila	1½	...	...	1½	...	...	
	Haldu Khata	½	...	...	½	...	65	Mango groves in camping grounds.
	Saneh	3	...	...	3	...	...	
	Total, Ganges Division ...	5	..	...	5	...	65	
Jhánsi Division ...	Sakhwan-Dhukwan	44	1	...	45	...	120	Teak, shisham, sál, bamboo, mango and jaman.
	Ganupura	37	1	...	38	...	120	
	Bhasneo	20	...	20	...	...	...	
	Magarpur	19	...	19	...	...	...	
	Total, Jhánsi Division ...	120	2	39	83	...	240	
Lalitpur Division ...	Kachnoda	25	...	...	25	...	...	Plantations of tún and miscellaneous trees.
	Deogarh	...	...	...	...			
	Dudhai	...	...	...	...			
	Sourai	...	...	...	...			
	Hadda	2	...	...	2			
	Total, Lalitpur Division ...	27	...	...	27	...	...	
Bánda Division ...	Mamaniya	...	...	...	...	...	...	Mamaniya less than ¼ acre containing teak.
	Kaluha	3	2	...	5	...	7	Kaluha contains shisham, mahua, jaman.
	Total, Bánda Division ...	3	2	...	5	...	7	
	Grand Total of cultural operations ...	1,043	9	39	1,013	...	1,257	
	Add for regular plantations	50	...	...	50	1,668	1,263	
	Total ...	1,093	9	39	1,063	1,668	2,520	As per head A. VIII. d. Form No. 58.

DATED NAINI TAL:
The 4th July 1890.

S. EARDLEY-WILMOT,
Offg. Conservator of Forests, Central Circle.

Form No. 54.

FOREST DEPARTMENT, CENTRAL CIRCLE, NORTH-WESTERN PROVINCES AND OUDH.

OUTTURN (IN CUBIC FEET, SOLID) OF TIMBER AND FUEL DURING THE YEAR 1889-90 AND AGENCY OF EXPLOITATION.

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or squared timber.					Miscellaneous.					Fuel.					Total.
	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Outturn.
Naini Tal.											I.—Reserved Forests.															
(*a*) Regeneration—																										
Selection fellings	51,180	800	10,148	62,128	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	13,230	63,030	...	...	76,260	1,38,388
(*d*) Amelioration—																									
Thinnings ...	...	...	...	...	...	112	...	10,184	10,296	...	...	...	...	...	...	...	...	...	...	18,288	704	...	...	18,992	29,288
Unclassed fellings	380	...	...	380	...	1,560	...	...	1,560	...	...	...	...	...	...	...	...	...	...	27,798	19,528	...	...	47,326	49,266
Standing dry, or fallen wood. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	.	...	...	...	...	...	17,306	36,234	...	...	53,540	53,540
Total .. .	51,560	800	10,148	62,508	...	1,672	...	10,184	11,856	...	..	...	..	...	...	...	...	..	...	76,622	1,19,496	...	...	1,96,118	2,70,482
(*a*) Regeneration—											II.—Protected Forests.														
Selection fellings	29,488	260	44,046	73,794	...	...	...	...	...	...	...	...	...	..	...	...	...	...	.	...	36,236	52,388	...	...	88,624	1,62,418
(*d*) Amelioration—																									
Thinnings	...	...	...	...	...	264	1,044	41,504	42,812	...	...	...	..	...	...	..	...	...	...	216	668	...	...	886	43,698
Unclassed fellings	3,000	...	...	3,000	...	464	...	...	464	...	...	...	..	...	...	...	...	...	...	27,252	32,316	...	...	59,568	63,032
Standing dry, or fallen wood. ...	...	...	...	...	...	...	...	...	. .	...	...	..	..	..	...	...	...	...	...	28,722	1,10,662	...	...	1,39,384	1,39,384
...	32,488	260	44,046	76,794	...	728	1,044	41,504	43,276	...	...	...	..	...	...	...	...	...	...	92,428	1,96,034	...	...	2,88,462	4,06,532
Total	84,048	1,060	54,194	1,39,302	...	2,400	1,044	51,688	55,132	...	...	...	...	...	...	...	...	...	...	1,69,050	3,15,530	...	...	4,84,580	6,79,014

Kumaon.																											
(*a*) Regeneration—													I.—Reserved Forests.														
Selection fellings	...	14,992	...	11,426	26,418	...	404	153	1,441	1,998	2,374	57,627	9,504	69,595	...	...	...	...	...	...	...	...	...	...	98,011		
(*c*) Amelioration—																											
Improvement fellings	...	567	...	...	567	...	21,249	...	...	21,249	...	3,999	...	...	3,999	...	...	...	...	...	...	545	...	...	545	26,360	
Unclassed fellings	...	1,974	...	...	1,974	...	7,345	...	...	7,345	...	39,731	...	..	39,731	...	...	...	...	...	...	20,040	...	...	20,040	69,090	
Standing dry or fallen wood.	...	21,310	...	13,212	34,522	...	20,186	...	...	20,186	...	34,434	506	.	34,940	...	...	...	...	...	...	5,07,212	54,240	1,80,702	7,42,154	8,31,796	
Total	...	38,843	...	24,638	63,481	...	49,178	153	1,441	50,772	2,374	1,35,791	10,100	...	1,48,265	..	...	...	...	...	...	5,27,797	54,240	1,80,702	7,62,739	10,25,257	
Garhwál.													I.—Reserved Forests.														
(*a*) Regeneration—																											
Selection fellings	...	11,980	...	...	11,980	...	106	...	...	106	...	1,62,129	...	...	1,62,129	...	16,527	...	...	16,527	...	...	...	...	...	1,90,742	
(*b*) Regeneration—																											
Coppice with standard	...	5,444	...	...	5,444	...	5,865	...	...	5,865	...	1,928	...	...	1,928	.	...	...	...	...	...	...	...	...	...	13,237	
(*c*) Amelioration—																											
Improvement fellings	...	...	...	...	...	...	...	...	...	...	...	10,671	...	.	10,671	...	...	...	...	...	...	...	...	...	...	10,671	
Unclassed fellings	...	...	...	...	...	...	3,497	...	...	3,497	...	...	...	.	...	...	8,406	8,308	11,969	28,683	...	...	...	...	...	32,180	
Standing dry or fallen wood.	...	4,006	97	91	4,194	...	9,807	...	...	9,807	...	...	...	.	...	...	44,275	...	...	44,275	...	1,62,638	...	...	1,62,638	2,20,914	
Total	...	21,430	97	91	21,618	...	19,275	...	...	19,275	...	1,74,728	...	.	1,74,728	..	69,208	8,308	11,969	89,485	...	1,62,638	...	...	1,62,638	4,67,744	
Ganges.													I.—Reserved Forests.														
(*a*) Regeneration—																											
Selection fellings	..	91	3,197	1,679	4,967	...	680	...	...	680	...	26,727	...	...	26,727	...	1,316	...	...	1,316	...	...	...	...	...	33,690	
Unclassed fellings	...	...	...	...	...	...	...	...	...	..	...	5,860	...	.	5,860	...	...	...	...	...	...	...	...	...	...	5,860	
Standing dry, or fallen wood.	...	134	...	...	134	...	697	...	...	697	...	44	...	...	44	...	96,229	...	...	96,229	...	2,19,532	...	300	2,19,832	3,16,936	
Total	..	225	3,197	1,679	5,101	...	1,377	...	...	1,377	...	32,631	...	...	32,631	..	97,545	...	...	97,545	...	2,19,532	...	300	2,19,832	3,56,486	
													III.—Unclassed Forests.														
Standing dry or fallen wood.	...	...	...	...	...	...	3	...	...	3	...	...	...	...	...	.	39,020	...	...	39,020	...	59,215	...	...	59,215	98,238	
Total	...	225	3,197	1,679	5,101	...	1,380	...	...	1,380	...	32,631	...	..	32,631	..	1,36,565	...	...	1,36,565	...	2,78,747	...	300	2,79,047	4,54,724	

OUTTURN (IN CUBIC FEET, SOLID) OF TIMBER AND FUEL DURING THE YEAR 1889-90 AND AGENCY OF EXPLOITATION—(*concluded*).

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or squared timber.					Miscellaneous.					Fuel.					Total.
	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Outturn.
Jhánsi.																									
(*a*) Regeneration—											I.—Reserved Forests.														
Selection fellings.	...	...	...	...	...	2,628	1,047	...	...	3,675	...	...	...	...	...	...	...	...	...	...	3,574	5,546	160	...	9,280	12,955
Lalitpur.																									
(*a*) Regeneration—											I.—Reserved Forests.														
Selection fellings.	300	200	105	...	605	250	80	170	...	500	...	...	...	...	...	3,001	925	675	...	4,601	900	950	...	190	2,040	7,746
											II.—Protected Forests.														
Selection fellings.	120	100	...	...	220	100	25	...	...	125	...	...	...	...	...	610	405	296	...	1,311	300	100	...	...	400	2,056
Total ...	420	300	105	...	825	350	105	170	...	625	...	...	...	...	...	3,611	1,330	971	...	5,912	1,200	1,050	...	190	2,440	9,802
Bánda.																									
a) Regeneration—											III.—Unclassed Forests.														
Selection fellings.	...	...	...	...	...	6,591	14,070	...	...	20,661	...	...	...	...	...	...	...	...	...	...	...	18,625	...	...	18,625	39,286
											ABSTRACT.														
(*a*) Regeneration—											I.—Reserved Forests.														
Selection fellings.	300	78,443	4,102	23,253	1,06,098	2,878	2,317	323	1,441	6,959	2,374	2,46,483	9,594	2,58,451		3,001	18,768	675	...	22,444	17,704	69,526	160	190	87,580	4,81,532
(*b*) Regeneration—																									
Coppice with standard.	...	5,441	...	...	5,441	...	5,865	...	...	5,865	...	1,928	...	...	1,928	...	...	...	...	...	...	...	...	...	...	13,237

(c) Amelioration—																										
Improvemen fellings.	...	507	...	...	567	...	21,249	...	...	21,249	...	14,670	...	...	14,670	...	...	...	...	...	...	545	...	...	545	37,031
(d) Amelioration—																										
Thinnings ...	...	...	...	...	...	...	112	...	10,184	10,296	...	.	...	...	...	...	...	...	...	18,288	704	...	...	18,992	29,288
Unclassed fellings.	...	2,354	...	...	2,354	...	12,402	...	...	12,402	...	45,591	...	.	45,591	...	8,406	8,908	11,969	28,683	27,798	39,568	...	...	67,366	1,56,39
Standing dry or fallen wood.	...	25,450	97	13,303	38,850	...	30,684	...	...	30,684	...	34,478	506	..	34,984	...	1,40,504	...	...	1,40,504	17,306	9,25,616	54,240	1,81,002	11,78,164	14,23,186
Total ..	300	1,12,258	4,199	36,556	1,53,313	2,878	72,629	323	11,625	87,455	2,374	3,43,150	10,100	..	3,55,624	3,001	1,67,678	8,983	11,969	1,91,631	81,096	10,85,959	54,400	1,81,192	13,52,647	21,40,670
II.—Protected Forests.																										
(a) Regeneration—																										
Selection fellings.	120	29,588	260	44,046	74,014	100	25	...	...	125	...	...	...	...	...	610	405	296	...	1,311	36,536	52,488	...	...	89,024	1,64,474
(b) Amelioration -																										
Thinnings ...	...	...	...	...	...	...	264	1,044	41,504	42,812	...	...	...	...	...	...	...	...	...	...	218	668	...	...	886	43,698
Unclassed fellings.	...	3,000	...	...	3,000	...	464	...	...	464	...	...	...	...	...	...	...	...	...	...	27,252	32,316	...	...	59,568	63,032
Standing dry or fallen wood.	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	28,722	1,10,662	...	...	1,39,384	1,39,384
Total ...	120	32,588	260	44,046	77,014	100	753	1,044	41,504	43,401	...	...	...	..	...	610	405	296	...	1,311	92,728	1,96,134	...	...	2,88,862	4,10,588
III.—Unclassed Forests.																										
(a) Regeneration—																										
Selection fellings	...	...	...	...	...	6,591	14,070	...	...	20,661	...	...	...	...	...	...	...	...	...	...	...	18,625	...	...	18,625	39,286
Standing dry or fallen wood.	...	...	...	...	...	...	3	...	...		...	...	...	...	...	...	39,020	...	...	39,020	...	59,215	...	...	59,215	98,238
Total ..	...	...	...	...	...	6,591	14,073	...	...	20,664	...	...	...	..	...	...	39,020	...	...	39,020	...	77,840	...	...	77,840	1,37,524
GRAND TOTAL..	420	1,44,846	4,459	80,602	2,30,327	9,569	87,455	1,367	53,129	1,51,520	2,374	3,43,150	10,100	...	3,55,624	3,611	2,07,103	9,279	11,969	2,31,962	1,73,824	13,09,933	54,400	1,81,192	17,19,349	26,88,782

NAINI TAL:
The 4th July 1890.

S. EARDLEY-WILMOT,
Offg. Conservator of Forests, Central Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH.

FORM No. 55.

OUTTURN OF MINOR FOREST PRODUCE DURING THE YEAR 1889-90.

Division.	Description of produce.	Produce removed or utilized.										Remarks.
		By Government agency		By purchasers.		By free grants.		By right holders.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
					I.—Reserved Forests.							
			Rs.		Rs.		Rs.		Rs.		Rs.	
Naini Tal.	Bambcos ... ... scores ...	...	...	277	72	...	...	...	...	277	72	
	Ringals ... ... ditto ...	...	...	54	2	...	...	...	...	54	2	
	Grazing	...	...	...	2,275	...	...	...	...	...	2,275	
	Other minor produce	...	...	...	849	...	...	...	...	...	849	
	Total ...	...	...	...	3,198	...	...	...	...	...	3,198	
					II.—Protected Forests.							
	Bamboos ... ... scores ...	...	...	11	3	...	...	...	...	11	3	
	Ringals ... ... ditto ...	...	...	675	28	...	...	...	...	675	28	
	Grazing	...	...	...	1,322	...	...	...	...	...	1,322	
	Other minor produce	...	...	...	2,063	...	...	...	...	...	2,063	
	Total ...	...	...	.	3,416	.	...	...	...	...	3,416	
	GRAND TOTAL ...	...	...	...	6,614	...	...	...	...	...	6,614	
					I.—Reserved Forests.							
Kumaun.	Bamboos ... ... scores ...	...	...	41,619	4,486	282	28	2,495	174	44,396	4,688	
	Grazing	...	...	...	2,045	...	...	...	...	...	2,045	
	Other minor produce	...	...	...	(a)29,223	...	720	...	410	...	30,353	(a) Rs. 103 for driftwood included in this.
	Total ...	...	...	...	35,754	...	748	...	584	...	37,086	
					I.—Reserved Forests.							
Garhwal.	Bamboos ... ... scores ...	...	...	1,41,071	14,272	20	2	1,915	233	1,43,006	14,507	
	Grazing	...	...	...	3,312	...	...	...	...	...	3,312	
	Other minor produce	...	...	...	(b)11,480	...	...	...	...	...	11,480	(b) Rs. 1,046 for driftwood included in this.
	Total ...	...	...	...	29,064	...	2	...	233	...	29,299	

							I.—Reserved Forests.							
Ganges.	Bamboos	...	...	scores	...	...	...	4,59,285	61,556	...	...	...	...	4,59,285	61,556	
	Grazing	...	...		...	...	...		5,666	...	...	...	...	...	5,666	
	Other minor produce		...		...	...	...		(c)6,380	...	...	...	...	...	6,380	(c) Rs 143 for driftwood included in this.
		Total			...	...	...		73,602	...			...	..	73,602	
							III.—Unclassed Forests.							
	Bamboos	...	...	scores	...	...	...	53,593	5,856	...	...	...	...	53,593	5,856	
	Grazing	...	...		...	...	...		378	...	...	...	...	...	378	
	Other minor produce		...		...	...	...		1,105	...	...	...	...	...	1,105	
		Total			...	...	...		7,339	...	...	...	...	...	7,339	
		Grand Total			...	...	...		80,941	...		..	...	...	80,941	
							I.—Reserved Forests.							
Jhánsi.	Bamboos	...	...	scores	...	3,015	1,113	715	180	...	...	...	...	3,730	1,293	
	Grazing	...	...		...	...	...	...	4,903	...	...	...	...	...	4,903	
	Other minor produce		...		...	...	367	...	249	...	...	...	...	...	616	
		Total			...	...	1,480	...	5,332	...	..	...	...	...	6,812	
							I.—Reserved Forests.							
Lalitpur.	Bamboos	...	...	scores	...	37 349	4,057	3,819	814	3,925	20	...	...	45,093	4,891	
	Grazing	...	...		...	...	...	...	2,091	...	...	...	...	...	2,091	
	Other minor produce		...		...	...	16	...	1,721	...	...	...	3	...	1,740	
		Total			...	...	4,073	..	4,626	...	20	...	3	..	8,722	
							II.—Protected Forests.							
	Bamboos	...	...	scores	...	2,432	264	816	86	...	...	...	...	3,248	350	
	Grazing	...	...		...	...	...	..	523	...	...	...	...	...	523	
	Other minor produce		...		...	...	...	...	212	...	...	...	...	...	212	
		Total			...		264	...	821	...	..	...	...	...	1,085	
		Grand Total			...		4,337		5,447	..	20	...	3	..	9,807	
							III.—Unclassed Forests.							
Bánda.	Bamboos	...	...	scores	...	3,424	508	1,877	322	...	...	...	...	5,301	830	
	Grazing	...	...		...	...	...	...	1,057	...	...	...	...	...	1,057	
	Other minor produce		...		...	...	3	...	(d)2,497	...	...	...	...	...	2,500	(d) Re. 1 for driftwood included in this.
		Total			...	...	511	...	3,876	...	...	...	...	...	4,387	

ABSTRACT.

Form No. 55.

FOREST DEPARTMENT, N. W. PROVINCES AND OUDH, CENTRAL CIRCLE.

OUTTURN OF MINOR FOREST PRODUCE DURING THE YEAR 1889-90.

Division.	Description of produce.	Produce removed or utilized. By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value	By right holders. Quantity	By right holders. Value.	Total. Quantity.	Total. Value.	Remarks.
					I.—Reserved Forests.							
			Rs.		Rs.		Rs		Rs		Rs.	
	Bamboos ... ... scores	40,364	5,170	6,46,786	81,380	4,227	50	4,410	407	6,95,787	87,007	
	Ringals	..	...	54	2	...	...	...	...	54	2	
	Grazing	...	...	...	20,292	...	...	...	...	...	20,292	
	Other minor produce	...	383	...	(e) 49,902	...	720	...	413	...	51,418	(e) Includes Rs. 1,292 for driftwood.
	Total ...	...	5,553	...	1,51,576	...	770	...	820	..	1,58,719	
					II.—Protected Forests.							
	Bamboos ... ... scores	2,432	264	827	89	...	...	...	...	3,259	353	
	Ringals ... ... ,,	...	...	675	28	...	...	...	...	675	28	
	Grazing	...	...	...	1,845	...	...	...	...	...	1,845	
	Other minor produce	...	...	...	2,275	...	...	...	...	...	2,275	
	Total ...	...	264	...	4,237	...	...	...	...	...	4,501	
					III.—Unclassed Forests.							
	Bamboos ... ... scores	3,424	508	55,470	6,178	...	...	...	...	58,894	6,686	
	Grazing	...	...	...	1,435	...	...	...	...	...	1,435	
	Other minor produce	...	3	...	(f) 3,602	...	..	...	...	...	3,605	(f) Includes Re. 1 for driftwood.
	Total ...	...	511	...	11,215	...	...	...	...	...	11,726	
	GRAND TOTAL ...	...	6,323	...	(g)1,67,028	...	770	...	820	...	1,74,946	(g) Includes Rs. 1,293 for driftwood.

NAINI TAL:
The 4th July 1890.

S. EARDLEY-WILMOT,
Offg. Conservator of Forests, Central Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1889-90.

Particulars.	No. or quantity.	Cubic feet.	Total of each head.	
			Number or quantity.	Cubic feet.
BALANCE IN HAND AT COMMENCEMENT OF THE YEAR.				
Miscellaneous ballis	2,038	7,113	...	..
Axle trees	114	228	...	...
Yokes	13	6	...	...
Plough shafts	5	2	...	...
Thin ballis for roofing	229	305	2,399	7,654
Firewood ... ... Mds	423	846	423	846
Charcoal ... ... ,,	92	920	92	920
Bamboos ... ... No.	222,324	No.	222,324	No.
Kiras ... ... ,,	24	No.	24	No.
Kurias ... ... ,,	2,697	No.	2,697	No.
RECEIVED FROM THE FORESTS IN DEPÔTS.				
Miscellaneous ballis	2,241	4,709	2,241	4,709
Firewood ... ... Mds.	87,003	174,006	87,003	174,006
Charcoal ... ... ,,	65	650	65	650
Bamboos ... ... No.	271,433	No.	271,433	No.
iras ... ... ,,	1,764	No.	1,764	No.
Kurias ... ... ,,	65,250	No.	65,250	No.
Grass ... ... Bdles.	254,200	Bundles.	254,200	Bundles.

Particulars.	No. or quantity.	Cubic feet.	Total of each head.	
			No. or quantity.	Cubic feet.
REMOVED BY PURCHASERS FROM DEPÔTS.				
Miscellaneous ballis	2,300	6,180	...	...
Axle trees	25	50	...	...
Plough shafts	4	1	...	...
Thin ballis for roofing	131	175	2,550	6,406
Firewood ... ... Mds.	86,535	173,070	86,535	173,070
Charcoal ... ... ,,	26	260	26	260
Bamboos ... ... No,	411,825	No.	411,825	No.
Kiras ... ... ,,	1,178	No.	1,178	No.
Kurias ... ... ,,	52,049	No.	52,049	No.
Grass ... ... Bdles	140,000	Bundles.	140,000	Bundles.
SOLD LOCALLY.				
Sál beams	45	480	...	...
,, scantlings	265	267	...	...
Shisham ,, ...	297	484	...	...
Tún ,, ...	676	915	...	...
Chir ,, ...	200	229	...	...
Miscellaneous ballis	2,280	8,766	...	...
Axle trees	553	1,659	...	...
Koru	100	100	4,416	12,900
Firewood ... ... Mds.	1,661	3,322	1,661	3,322
Bamboos ... ... No.	512,598	No.	512,598	No.
Hides ... ... ,,	4	No.	4	No.

Form No. 56.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1889-90—(*concluded*).

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet
RECEIVED FROM THE FORESTS AND SOLD LOCALLY.				
Sál beams	45	480		
„ scantlings	265	267		
Shisham „	297	484		
Tún „	676	915		
Chír „	200	229		
Miscellaneous ballis	2,280	8,766		
Axle trees	553	1,650		
Koru	100	100	4,416	12,900
Firewood ... ... Mds.	1,661	3,322	1,661	3,322
Bamboos ... ... No.	512,598	No.	512,598	No.
Hides ... ... „	4	No.	4	No.
Grand Total ... Timber	...	...	2,056	25,263
Grand Total ... Firewood ... Mds.	...	...	89,087	178,174
Grand Total ... Charcoal ... „	...	...	157	1,570
Grand Total ... Bamboos ... No.	...	...	1,006,355	No.
Grand Total ... Kiras .. ... „	...	...	1,788	No.
Grand Total ... Kurias ... „	...	...	67,947	No.
Grand Total ... Grass .. ... Bdles.	...	...	254,200	No.
Grand Total ... Hides .. ... No.	...	...	4	No.

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No or quantity.	Total of each head. Cubic feet.
LOST OR WRITTEN OFF AS USELESS.				
Firewood ... ... Mds	120	240	120	240
Charcoal ... ... „	59	590	59	590
Kiras ... ... No.	5	No.	5	No.
Kurias ... ... „	1,171	No.	1,171	No.
USED BY DEPARTMENT.				
Miscellaneous ballis	22	33	22	33
BALANCE AT CLOSE OF THE YEAR.				
Miscellaneous ballis	1,867	5,609		
Axle trees	89	178		
Yokes	13	6		
Plough shafts	1	1		
Thin ballis for roofing	98	130	2,068	5,924
Firewood ... ... Mds.	771	1,542	771	1,542
Charcoal ... ... „	72	720	72	720
Bamboos ... ... No.	81,932	No.	81,932	No.
Kiras ... ... No.	605	No.	605	No.
Kurias ... ... „	14,727	No.	14,727	No.
Grass ... ... Bdles.	114,200	Bundles.	114,200	Bundles.
Grand Total ... Timber	...	...	9,056	25,263
Grand Total ... Firewood ... Mds.	...	...	89,087	178,174
Grand Total ... Charcoal ... „	...	...	157	1,570
Grand Total ... Bamboos ... No.	...	...	1,006,355	No.
Grand Total ... Kiras ... ... „	...	...	1,788	No.
Grand Total ... Kurias ... „	...	...	67,947	No.
Grand Total ... Grass ... ... Bdles.	...	...	254,200	Bundles.
Grand Total ... Hides ... ... No.	...	...	4	No.

NAINI TAL:
The 4th July 1890.

S. EARDLEY-WILMOT,
Offg. Conservator of Forests, Central Circle.

Form No. 57.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1889-90.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favour of the year.	Against the year.	
Timber.			Rs.			Rs.		Rs.	
Miscellaneous ballis	2,038	7,118	302	1,867	5,609	370	...	...	
Axle trees	114	228	11	89	178	9	...	...	
Thin ballis for roofing ...	229	305	22	98	130	14	...	...	
Plough shafts	5	2	...	1	1	...	...	...	
Yokes	13	6	2	13	6	2	...	...	
Total, Timber ...	2,399	7,654	427	2,068	5,924	395	...	32	
Firewood, charcoal, &c.									
Firewood ... ... Mds.	423	846	77	771	1,542	148	...	...	
Charcoal ... ... ,,	92	920	50	72	720	27	...	...	
Bamboos ... ... Nos.	222,324	...	1,618	81,932	...	893	...	...	
Kirns ... ... ,,	24	...	2	605	...	49	...	...	
Kurlas ... ... ,,	2,097	...	15	14,727	...	76	...	...	
Grass ... ... Bundles	...	...	...	114,200	...	71	..	...	
Total, Fuel, &c. ...	...	1,766	1,762	...	2,262	1,264	...	498	
Total ..	...	...	2,189	...	...	1,659	...	530	

Net difference against the year, Rs. 530.

Form No. 57.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1889-90.

Description of Live and Dead Stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value		Remarks.
	No.	Value.	No.	Value.	In favour of the year.	Against the year.	
		Rs.		Rs.	Rs.		
Live stock.							
Elephants	9	14,000	11	16,700	...	...	
Bullocks	53	858	44	820	...	...	
Total, Live stock	62	14,858	55	17,520	2,662	...	
Dead stock.							
Buildings	128	96,132	148	108,326	...	...	
Sheds	4	866	10	1,090	...	..	
Tools and plants	159,764	18,361	16,520	20,365	...	..	
Carts	26	637	25	625	...	...	
Almirahs	5	195	5	195	...	...	
Gunpowder barrels	2	86	2	86	...	...	
Slowmatch barrels	1	84	1	84	...	...	
Total, Dead stock	16,140	116,361	16,706	130,771	14,410	..	
Total ...	...	131,219	...	148,291	17,072	...	

Net difference in favour of the year, Rs. 17,072.

NAINI TAL:
The 4th July 1890.

S. EARDLEY-WILMOT,
Offg. Conservator of Forests, Central Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

Form No. 58.

SUMMARY OF REVENUE OF THE DIFFERENT DIVISIONS DURING 1889-90.

Budget Heads.	Direction.	Naini Tal Division.	Kumaun Division.	Garhwál Division.	Ganges Division.	Jhánsi Division.	Lalitpur Division.	Bánda Division.	Total.
RECEIPTS.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.
I.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY—									
a. Timber	...	...	...	...	...	161 11 4	692 0 6	274 12 7	1,128 8 5
b. Firewood and charcoal	...	37,786 3 1	...	...	...	237 4 5	140 14 6	...	38,164 6 0
c Bamboos	...	...	...	...	...	1,113 8 3	4,320 9 0	508 0 3	5,941 1 6
d. Sandal wood	...	...	...	...	...	...	...	..	...
e. Grass and other minor produce	...	...	...	...	...	367 7 9	16 2 0	3 4 0	386 13 9
II.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS—									
a. Timber	...	8,108 15 3	1,12,394 9 5	1,74,225 4 0	54,905 10 4	81 0 0	670 11 5	433 1 0	3,50,819 3 5
b. Firewood and charcoal..	...	6,218 15 7	6,134 7 1	2,037 15 3	2,366 9 8	277 5 2	174 2 0	289 14 0	17,499 4 9
c. Bamboos	...	105 7 0	4,486 5 3	14,271 10 3	67,412 0 1	179 14 0	900 4 0	321 15 0	87,677 7 7
d. Grazing and fodder grass	...	3,596 13 11	2,044 12 7	3,312 0 3	6,043 11 5	4,903 7 10	2,613 9 0	1,056 13 9	23,571 4 9
e. Other minor produce	...	2,912 0 0	29,120 6 5	10,433 15 5	7,342 2 11	249 4 0	1,932 10 0	2,495 11 3	54,486 2 0
III.—DRIFT AND WAIF WOOD AND CONFISCATED FOREST PRODUCE,	...	...	103 2 0	1,046 4 0	142 8 0	...	...	0 12 0	1,292 10 0
IV —REVENUE FROM FORESTS NOT MANAGED BY GOVERNMENT—									
a. Duty on foreign timber and other forest produce ...	...	...	...	...	...	...	...	...	...
b. Revenue from shared and private forests	...	...	...	...	...	...	...	...	...
V.—MISCELLANEOUS—									
a. Fines and forfeitures	...	7 3 0	37 2 0	60 4 0	...	...	...	...	104 9 0
b. Refunds	...	...	8 0 0	5 0 0	57 12 0	3 6 2	...	...	74 2 2
c. Other sources	5 0 0	7 0 0	1,404 8 2	7,973 4 3	1,542 3 8	106 1 6	...	758 14 6	11,797 0 1
Total Receipts	5 0 0	58,742 9 10	1,55,733 4 11	2,13,365 9 5	1,39,812 10 1	7,679 6 5	11,460 14 5	6,143 2 4	5,92,942 9 5

CALCUTTA:
The 7th June 1890.

J. BRIDGNELL,
Chief Superintendent (Forests).

Form No. 58.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE

SUMMARY OF EXPENDITURE OF THE DIFFERENT DIVISIONS DURING 1889-90.

Budget heads.	Direction.	Naini Tal Division.	Kumaun Division.	Garhwál Division.	Ganges Division.	Jhánsi Division.	Lalitpur Division.	Bánda Division.	Total.
A.—CONSERVANCY AND WORKS.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produde removed from the Forests by Government Agency—									
a. Timber	...	...	1,697 1 4	...	...	28 14 1	184 14 0	137 4 9	2,048 2 2
b. Firewood and charcoal	...	19,651 8 6	...	...	...	226 13 0	...	..	19,878 5 6
c. Bamboo	...	...	...	...	...	182 0 4	400 8 7	181 6 0	763 14 11
d. Sandal wood	...	...	...	...	...	...	...	...	...
e. Grass and other minor produce	...	...	277 2 3	...	...	306 7 10	36 0 0	1 12 6	621 6 7
II.—Timber and other produce removed from the Forests by Consumers or Purchasers	...	502 5 2	7,185 13 3	7,100 0 0	9,297 4 3	676 12 5	358 13 4	...	25,121 0 5
III.—Drift and waif wood and confiscated Forest produce	...	...	...	...	..	...	...	...	...
IV.—Revenue from Forests not managed by Government—									
a. Duty on foreign timber and other forest produce ...	...	...	...	...	...	...	...	...	...
b. Revenue from shared and private forests	...	...	...	...	...	...	...	...	...
V.—Rent of leased Forests and payment to Shareholders in Forests managed by Government	...	...	...	...	...	...	...	...	...
VI.—Live Stock, Stores, Tools and Plant—									
a. Purchase of cattle	...	...	...	...	...	...	...	502 9 0	502 9 0
b. Feed and keep of cattle	...	...	...	...	...	...	11 0 0	...	11 0 0
c. Purchase of stores, tools and plant	331 0 3	182 9 0	1,180 1 5	2,663 13 8	1,198 1 8	354 14 8	1,617 4 10	...	7,014 4 3
VII.—Communications and Buildings—									
a. Roads and bridges	...	1,220 15 7	13,264 4 10	14,799 8 9	4,902 15 4	139 15 9	250 0 0	46 7 6	34,624 3 9
b. Buildings	309 10 2	913 14 0	7,415 12 3	4,399 11 0	3,399 8 11	205 4 0	399 6 2	70 11 0	17,203 13 6
c. Other works	...	...	396 4 2	189 15 8	11 0 6	...	...	...	597 4 4
VIII.—Demarcation, improvement and extension of Forests—									
a. Demarcation	...	131 5 1	422 3 8	156 9 3	402 12 9	279 8 6	...	157 4 8	2,249 11 11
b. Compensation for land and rights	...	...	...	...	6 15 8	...	...	2,700 0 0	2,706 15 8
c. Survey and working plans	...	...	...	...	132 15 5	...	...	...	1,786 2 5
d. Sowing and planting	723 2 0	865 12 7	3 0 0	61 4 8	65 4 0	240 0 0	...	6 13 6	2,520 2 2
e. Protection from fire	...	1,772 4 7	242 13 4	192 14 9	2,372 8 11	298 5 11	100 0 0	...	17,914 0 9
f. Other works	95 4 0	1,004 12 5	2,946 6 6	11,096 11 0	475 6 0	...	...	...	3,421 8 5
IX.—Miscellaneous—	..	1,936 0 11	268 15 9	741 1 9	...	...	...	...	128 8 3
a. Refunds	...	...	126 15 0	...	...	...	...	1 9 3	20 15 0
b. Law charges	1 7 0	...	...	...	...	...	...	19 8 0	1,347 5 6
c. Other charges	15 3 0	24 3 0	197 8 3	550 1 6	496 6 10	62 5 8	...	1 9 3	
TOTAL, A.—Conservancy and Works ...	1,565 10 5	28,205 10 10	36,107 1 11	42,499 11 6	23,443 11 5	3,792 4 2	3,587 14 11	3,836 9 5	1,43,038 10 7

Calcutta:
The 7th June 1890.

J. BRIDGNELL,
Chief Superintendent (Foreste).

Form No. 58.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

SUMMARY OF EXPENDITURE OF THE DIFFERENT DIVISIONS DURING 1889-90.

Budget heads.	Direction.	Naini Tal Division.	Kumaun Division.	Garhwál Division.	Ganges Division.	Jhánsi Division.	Lalitpur Division.	Bánda Division.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Total A. Conservancy and works ...	1,565 10 5	28,205 10 10	36,107 1 11	42,499 11 6	23,443 11 5	3,792 4 2	3,587 14 11	3,836 9 5	1,43,038 10 7
B.—ESTABLISHMENT.									
I.—SALARIES.									
a. Conservators	13,911 4 8	...	...	...	...	...	...	...	13,911 4 8
b. Superior officers	...	6,600 0 0	10,652 15 1	7,748 6 1	10,078 8 4	...	...	...	35,079 13 6
c. Subordinate forest and depôt establishments	...	3,735 10 9	8,040 14 9	9,919 13 3	6,626 5 11	1,162 8 0	1,670 7 8	1,374 14 2	32,530 10 6
d. Office establishments	4,049 15 5	1,080 0 0	2,117 3 6	1,939 4 4	1,506 13 6	60 0 0	185 0 7	695 0 0	11,633 5 4
e. Deputation and special allowances	...	1,800 0 0	200 0 0	20 0 0	...	...	.	...	2,020 0 0
II.—TRAVELLING ALLOWANCES—									
a. Conservators	1,394 2 0	...	...	...	...	...	...	...	1,394 2 0
b Superior officers	255 10 0	955 0 0	1,906 2 0	1,195 0 0	1,086 2 6	..	...	...	5,487 14 6
c. Subordinate forest and depôt establishments	...	418 1 0	828 5 11	1,384 9 4	1,165 3 7	229 8 0	227 8 0	175 0 0	4,428 3 10
d. Office establishments	157 3 6	97 8 0	557 5 4	509 5 4	465 6 8	...	...	92 6 8	1,879 3 6
III.—CONTINGENCIES—									
a. Stationery	6 3 6	106 8 5	90 5 0	11 3 9	53 9 9	18 0 9	11 8 0	11 0 0	308 6 5
b Carriage of tents and records	512 15 8	232 9 2	556 2 5	434 14 3	490 2 2	...	...	4 15 6	2,231 11 2
c. Rents, rates and taxes	101 10 6	20 0 0	11 0 0	11 0 0	10 0 0	12 0 0	...	...	165 10 6
d. Pay of police guards	300 0 0	...	.	...	.	..	...	...	300 0 0
e Official postage	332 1 6	65 0 6	99 2 6	99 5 0	97 2 6	19 11 0	43 3 6	...	755 10 6
f. Sundries	643 6 6	94 11 0	237 6 9	315 0 11	190 15 5	14 4 0	67 11 6	23 13 9	1,587 5 10
TOTAL B.—ESTABLISHMENTS ...	21,664 9 3	15,205 0 10	25,386 15 3	23,567 14 3	21,770 6 4	1,515 15 0	2,205 7 3	2,377 2 1	1,13,713 6 3
GRAND TOTAL OF EXPENDITURE ...	23,230 3 8	43,410 11 8	91,494 1 2	66,067 9 9	45,214 1 9	5,308 3 2	5,793 6 2	6,213 11 6	2,56,752 0 10

CALCUTTA :
The 7th June 1890.

J BRIDGNELL,
Chief Superintendent (Forests).

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

Dr. ACCOUNT CURRENT FOR THE YEAR 1889-90. Cr.

	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
To *Cash Balance*	...	5,914 5 3	By *Expenditure as per Annual Summary Form No.* 58 ...	...	2,56,752 0 10
„ *VIII.—Assessed Taxes—*					
Income Tax—Deductions from salaries	...	1,459 0 6	„ *Deposits*	...	30 0 0
„ *Revenue as per Annual Summary, Form No.* 58	...	5,92,942 9 5	„ *Forest Cash Remittances—Local—*		
			Remittances to Treasuries	5,53,291 1 1	...
„ *Service Funds—*			Inter-Divisional Transfers	296 0 0	5,53,587 1 1
Civil Fund—Ordinary, Bengal	...	...			
„ Additional, Bengal	...	...			
Military Fund—Bengal	51 9 8	...	„ *Advances Recoverable*	...	44,952 1 11
Madras	...	...			
„ Orphan Fund—Bengal ...	44 9 6	...	„ *Suspense*	...	0 0 10
Uncovenanted Service Family Pension Fund—Bengal ...	971 4 0	...	„ *Account Current (other Governments)—*		
General Family Pension Fund	...	...	Remittances to the Government of India	...	10,218 9 4
Hindu Family Annuity Fund	...	1,067 7 2			
„ *Deposits*	...	...			
„ *Forest Cash Remittances—Local—*					
Forest cheques drawn	2,62,154 8 0	...	„ *Inter-Departmental Transfers—*		
Inter-Divisional Transfers	734 0 0	2,62,888 8 0	Public Works Department ...	...	...
„ *Advances recoverable*	...	51,024 6 4			
„ *Suspense*	...	0 0 10			
„ *Account Current (other Governments)—*					
Remittances from Government of India	...	3,818 9 0	Military Department, Bengal	...	39,240 2 9
„ *Inter-Departmental Transfers—*					
Public Works Department ordinary	178 14 0	...	Civil Department	...	...
Marine Department	15 0 0	...			
Military Department, Bengal	0 2 0	...			
Civil Department—					
Survey of India	250 12 0	...			
Mathematical Instrument Department ...	825 1 0	...			
Miscellaneous	286 15 0	1,556 12 0	„ *Cash Balance*	...	15,892 2 9
Total ...	...	9,20,671 10 6	Total ...	...	9,20,671 10 6

CALCUTTA:
The 7th June 1890.

J. BRIDGNELL,
Chief Superintendent (Forests)

Form No. 60.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

REVENUE RECEIVED AND OUTSTANDINGS ON ACCOUNT OF REVENUE DURING 1889-90.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Direction ...	Timber, poles, grazing dues, and minor produce.	...	5 0 0	5 0 0	5 0 0	...
Naini Tal ...	Ditto ditto ...	75 0 0	59,323 9 10	59,398 9 10	58,742 9 10	656 0 0
Kumaun ...	Ditto ditto ...	...	1,58,750 5 11	1,58,750 5 11	1,55,733 4 11	3,017 1 0
Garhwál ...	Ditto ditto ...	...	2,13,365 9 5	2,13,365 9 5	2,13,365 9 5	...
Ganges ...	Ditto ditto ...	...	1,30,812 10 1	1,30,812 10 1	1,30,812 10 1	...
Jhánsi ...	Ditto ditto ...	330 0 0	7,438 7 5	7,768 7 5	7,679 6 5	89 1 0
Lalitpur ...	Ditto ditto ...	...	11,460 14 5	11,460 14 5	11,460 14 5	...
Bánda ...	Ditto ditto ...	843 3 9	6,201 8 10	7,044 12 7	6,143 2 4	901 10 3
	Total ...	1,248 3 9	5,96,358 1 11	5,97,606 5 8	5,92,942 9 5	4,663 12 3

NAINI TAL:
The 4th July 1890.

S. EARDLEY-WILMOT,
Offg. Conservator of Forests, Central Circle.

Form No. 61.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

OUTSTANDINGS AND LIABILITIES ON ACCOUNT OF CONTRACTORS AND DISBURSERS FOR 1889-90.

Division.	Department Debtor.			Department Creditor.			Balance due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (Outstandings).	By Department (Liabilities).
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Direction.. ...		586 4 5	586 4 5	127 14 8	645 5 9	773 4 5	187 0 0	...
Naini Tal, ...		3,688 6 1	3,688 6 1	704 11 8	3,265 7 0	3,970 2 8	281 12 7	...
Kumaun		21,857 9 7	21,857 9 7	2,867 9 8	20,399 13 2	23,267 6 10	1,409 13 3	...
Garhwál		11,783 3 3	11,783 3 3	5,051 10 0	7,340 8 3	12,392 2 3	608 15 0	...
Ganges		8,143 2 5	8,143 2 5	235 9 6	8,297 14 7	8,533 8 1	390 6 0	0 0 4
Jhánsi		1,720 14 10	1,720 14 10	281 9 7	1,673 4 0	1,954 13 7	233 14 9	...
Lalitpur		1,110 8 7	1,110 8 7	314 15 0	1,166 9 2	1,481 8 2	370 15 7	...
Bánda		2,134 5 2	2,134 5 2	...	2,163 4 0	2,163 4 0	28 14 10	...
Total		51,024 6 4	51,024 6 4	9,584 0 1	44,952 1 11	54,536 2 0	3,511 12 0	0 0 4

CALCUTTA:
The 7th June 1890.

J. BRIDGNELL,
Chief Superintendent (Forests).

Form No. 62.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, CENTRAL CIRCLE.

FINANCIAL RESULTS OF THE YEAR 1889-90.

Division.	Timber and other produce removed from the forests by Government agency.		Other revenue.		Formation, protection and improvement of forests.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Direction ...	...	...	5	...	...	5	...	Direction Division charges, amounting to Rs. 23,230, distributed as follows amongst Divisions :—
Naini Tal ...	37,786	26,198	20,957	6,956	12,257	58,743	45,411	
Kumaun ...	...	1,974	1,55,733	34,912	31,608	1,55,733	68,494	
Garhwál ...	...	...	2,13,366	34,467	39,621	2,13,366	74,088	
Ganges ...	..	...	1,39,813	28,028	22,186	1,39,813	50,214	
Jhánsi ...	1,879	1,045	5,800	1,761	2,902	7,679	5,708	
Lalitpur ...	5,170	2,702	6,291	1,511	2,180	11,461	6,393	
Bánda ...	786	646	5,357	1,305	4,493	6,143	6,444	
Total ...	45,621	32,565	5,47,322	1,08,940	1,15,247	5,02,943	2,56,752	

	Rs.
Naini Tal ...	2,000
Kumaun ...	7,000
Garhwál ...	8,000
Ganges ...	5,000
Jhánsi ..	400
Lalitpur ...	600
Bánda ...	230
Total ...	23,230

The debits have been made as follows :—

Naini Tal and Lalitpur Divisions

I.—Timber and other produce.

$$A\left[I+\frac{VI}{2}+\frac{VII}{3}+\frac{IX}{3}\right]\quad B+\frac{\text{Direction Division quota of charges.}}{3}$$

II. —ther produce.

$$A\left[II+III+IV+\frac{V}{2}+\frac{VII}{3}+\frac{IX}{3}\right]\quad B+\frac{\text{Direction Division quota of charges.}}{3}$$

III.—Formation, protection and improvement of Forests.

$$A\left[\frac{VI}{2}+\frac{V}{2}+\frac{VII}{3}+VIII+\frac{IX}{3}\right]\quad B+\frac{\text{Direction Division quota of charges.}}{3}$$

Kumaun, Garhwál and Ganges Divisions.

I.—Timber and other produce.

Nil. Except in the Kumaun Division where the expenditure under A I has been debited against Revenue Head I.

II.—Other Revenue.

$$A\left[II+III+IV+V+\frac{VI}{2}+\frac{VII}{2}+\frac{IX}{2}\right]\quad B+\frac{\text{Direction Division quota of charges.}}{2}$$

III.—Formation, protection and improvement of Forests.

$$A\left[\frac{VI}{2}+\frac{VII}{2}+VIII+\frac{IX}{2}\right]\quad B+\frac{\text{Direction Division quota of charges.}}{2}$$

Jhánsi and Bánda Divisions ...

I —Timber and other produce.

$$A\left[I+III+IV+\frac{V}{6}+\frac{VI}{6}+\frac{VII}{6}+\frac{IX}{6}\right]\quad B+\frac{\text{Direction Division quota of charges.}}{12}$$

II.—Other produce.

$$A\left[II+\frac{V}{3}+\frac{VI}{3}+\frac{VII}{3}+\frac{IX}{3}\right]+\frac{5}{12}\text{ of B and Direction Division quota.}$$

III.—Formation, protection and improvement of Forests.

$$A\left[\frac{V}{2}+\frac{VI}{2}+\frac{VII}{2}+VIII+\frac{IX}{2}\right]+\frac{\text{B and Direction Division quota.}}{2}$$

NAINI TAL :
The 4th July 1890.

S. EARDLEY-WILMOT,
Offg. Conservator of Forests, Central Circle.

No. 87L.G of 1890-91.

From

Captain E. S. WOOD,

Conservator of Forests,

N.-W. Provinces and Oudh,

Oudh Circle,

To

The SECRETARY to GOVERNMENT, N.-W. P. and OUDH,

in the Revenue (Forests) Department.

Dated Naini Tal, the 4th August 1890.

Sir,

I have the honour to submit the Annual Progress Report of the Oudh Circle for the year 1889-90. The principal cause of the delay in submitting this report has been the influenza, which attacked the office establishment of the Gorakhpur Division, and hence the letter of the Assistant Comptroller-General (Forests), intimating that the figures of the annual forms for 1889-90 can be adopted for the Administration Report, was only received on the 21st July 1890, and the compilation of the annual statements which embody the transactions of all divisions was much delayed.

I have the honour to be,

Sir,

Your most obedient servant,

E. S. WOOD, Captain,

Conservator of Forests,

N.-W. Provinces and Oudh,

Oudh Circle.

OUDH CIRCLE REPORT.

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OUDH CIRCLE,

N.-W. PROVINCES AND OUDH.

ANNUAL PROGRESS REPORT

OF

FOREST ADMINISTRATION

For the year ending 31st March 1890.

By Captain E. S. Wood, Conservator of Forests, Oudh Circle.

INTRODUCTION.

1. *Conservator's inspection of Forests.*—Having suffered very much from fever in the commencement of the year (1889), I did not spend so much time in the forests as usual, but made Lucknow my headquarters, making short and frequent visits to the places where works were going on. I left Naini Tal on the 7th October 1889, returning on the 4th May 1890. I went along the line of the Gola-Pilibhít Extension Railway from the Oudh border, near Mailani, to the town of Pilibhít, and made arrangements for fuel for lime and brickburning where necessary. I visited Bhira twice, and saw the improvement fellings, and arranged for the fuel for the railway from Gola to the Sháhjahánpur border. I inspected the sleeper operations in Kheri. In Bahraich I only inspected the office. In Gonda I inspected the lands to be made over to the Barwárs in exchange for sál bearing lands in the hands of the Deputy Commissioner. To Gorakhpur I went twice and saw the plantation at Sakhwi, the sleeper works at Lehra, &c., and the improvement fellings. I also visited the newly formed depôt at Deoria on the Bengal and North-Western Railway. All divisional officers were for the greater part of the year living in and inspecting their forests.

2. *Inspection of offices.*—I inspected all the divisional offices during the year and found them in order. This work, I consider, is superfluous, as the Conservator really only examines the copies of the accounts that have been sent to the Assistant Comptroller-General of Forests or to himself, or the accounts in progress.

3. *System of working through and with District Officers.*—The system continues to work well, and the officers mentioned below have given great assistance in conservancy:—

Mr. Macpherson, Pilibhít.
Colonel Cowie, Kheri.
Colonel Harrison, Bahraich.
Mr. Gibson, Gonda and Bahraich.
Messrs. Roberts and Hose, Gorakhpur.

Colonel Grigg also has helped the Superintendent of the Bahramghát Division whenever possible.

There have been a few departures from the regular routine in which a Commissioner has passed orders without consulting the Conservator, and some cases have gone

up to Government without the Commissioner's taking the opinion of the Conservator, but such departures I hope will not occur again.

4. *The year* 1889-90.—The principal event of the year was the commencement of the extension of railway from Gola to Pilibhít, for which the sleepers were supplied from the Kheri forests. There was much activity in the timber market during the year; besides the demand for sleepers for the Gola-Pilibhít extension, we had to supply the Rájputána-Malwa Railway with sleepers, also the newly sanctioned branch line from Gonda to Bahramghát. Arrangements for money and sawyers from distant places had to be made on very short notice, as the new lines were only sanctioned late in the season; fuel, baib, other grasses, and other minor produce have been sold in large quantities, and owing to the lessening of the export of timber, &c., from Nepal, there was a great demand for timber, &c., upon our forests. Advantage was taken of the circumstance to sell dead and dying trees in the Motipur range of the Bahraich Division, and to clear off old stock from the Bahramghát and Lucknow Depôts. Fuel operations on a large scale were started in Gorakhpur, and owing to the comparative cheapness of railway carriage, sál and arsaina bark have been sent in large quantities to Cawnpore, and it is hoped the foundation for a large business in that article (formerly unutilized) has been laid.

Influenza, which came to India *viâ* Bombay, attacked our establishments, and in Gorakhpur the office hands were laid up with it, and this has been the principal cause of the delay in submitting this report.

CHAPTER I.

I.—Area and Boundaries.

5. *Area of the Circle.*—There was no actual change in the area during the year 1889-90.

6. *Area of Divisions.*—The area of divisions is also the same as in 1888-89 :—

Division.	Area on 1st April 1889.	Area on 31st March 1890.	Difference.
	Sq. mls.	Sq. mls.	
Pilibhít	152	152	
Bhira	*151	151	—131 acres.
Kheri (trans-Sarda)	263	263	
Bahraich	325	325	
Gonda	155	155	
Gorakhpur	157	157	
Total	1,203	1,203	

* 131 acres in Bhira subdivision, grant No. 3, near Rai Khura, pargana Bhur.

A small adjustment has to be made in the Bhira Subdivision of Kheri, Khamaria Forest, formerly known as grant No. 3 of Bhur; 131 acres were originally given over to the grantee, and the area has to be taken out of the revenue survey map. The land was supposed to be forest land, but a case came up this year when the Government ordered that the rent was to be paid to the grantee.

(*a*) In next year's report the exact area of the Gorakhpur forests should be obtained from the Settlement Officer and adopted. It is believed that it is 170½ square miles against 157 now entered.

(*b*) The actual areas of the forests have not yet been worked out, but when the opportunity offers, this work will be undertaken, and there is no doubt that the area will be slightly in excess of the figures now shown.

(*c*) During the year proposals have been submitted to Government for the exchange of certain village lands in Kheri trans-Sarda, belonging to the Khairagarh estate, in exchange for outlying portions of forests; also in Bahraich for certain lands belonging

to Rája Hira Singh, Talúkdár, Raghu Nandan Singh and the Rája of Bhinga; but the matter has not yet been quite settled. Exchanges with the Rája of Nánpárá have not been approved of, but something will probably be done to prevent the villages belonging to him in the vicinity of valuable sál forest from becoming mere grazing centres. In the Nawábganj forest of Gonda portions of Shambhu Nagar, Jeypur and Rámgarh (either miscellaneous forest, scrub or grass, with a small percentage of sál) when sanction is obtained will be exchanged with the district forest of Debi Nagar and private forest of Jotepur, pure sál bearing lands, which will be beneficial both to the Forest Department and to the district for the settlement of Barwárs (a criminal class): but the notification of proposal in the Government Gazette has not yet been published;* some other small exchanges are under consideration, by which the forest will be brought into one ring fence and outlying portions allowed to be cultivated. In Gorakhpur the revenue survey is now finished, and the land settlement is still going on. When this is finished it is hoped the Forest Department will obtain possession of about 4,000 acres of district grass, rukhs and other such lands. Should this be arranged, the Forest Department will propose several exchanges with private landholders, to consolidate the Government forest area, especially for the sake of fire conservancy, where the owners of private forests have their forests adjoining or mixed up with Government forest.

7. *Boundaries circle.*

Division.	I. Miles of new boundary inspection path.	II. Miles of new ditching.	III. Miles of broad boundary cleared.	IV. Number of posts erected.	V. Miles of Nepal boundary cleared.
	M. f.	M. f.	M. f.	Pillars.	M. f.
Pilibhít	...	1 2½	...	...	...
Bhira (cis-Sarda)	3 4	2 2	...	...	...
Kheri (trans-Sarda)	...	7 6	...	175	13 4
Bahraich	...	34 4	...	...	...
Gonda	65 0	...	2 4	...	...
Gorakhpur	...	...	...	...	...
Total ...	68 4	45 6½	2 4	175	13 4

The divisional officers have all inspected the boundaries of their divisions during the year under review. Nearly 45 miles 6½ furlongs of new ditching were completed. In Kheri the boundaries between the Government forest and parts of the Khairagarh estate, which it is hoped will be exchanged, are being obliterated, and if the exchange proposed is not effected this portion of the divisional boundary will require resurveying and demarcating.

8. *Divisional boundaries.*—The progress made in ditching forest boundaries is shown below:—

(*a*) *Pilibhít.*—1 mile 2½ furlongs of ditching 3′ × 3′ were done during the year. The boundary of the Dhanáraghát range grant No. 18 is not clear, and the Collector of Pilibhít has been requested to send a kanúngo to erect *pakka* pillars in conjunction with the forester of the range. (*b*) *Bhira.*—The outer work was finished in 1888-89: 3 miles of internal boundary were done during the year. (*c*) *Kheri.*—7 miles 6 furlongs of ditching were redug: repairs to the boundary line between Dudwá and Balrámpur were done; and this has now been completed. (*d*) *Bahraich.*—34¼ miles of ditching were cleared. (*e*) *Gonda.*—The boundaries between Tulsipur forests and Balrámpur estate were inspected and repaired, and 20 miles of ditching have been completed by the Balrámpur estate, and the work is going on in the east; all other boundary lines were cleared and repaired, about 65 miles. (*f*) *Gorakhpur.*—The boundaries are all correct: some small cases have to be decided or to be settled in civil courts.

* Since published, N.-W. P. & Oudh Gazette No. $\frac{556F.}{90A-15}$ and $\frac{559F.}{90A-13}$ of 1st August 1890.

9. *The Nepal boundary.*—The Nepal authorities do not keep the boundary clear. They have done nothing during the year to keep clear the stipulated 30 feet; this has been the subject of separate correspondence in previous years, but with no results, though the Government of India had referred the matter to the Nepal Darbár.

(*a*) *Kheri.*—Five old masonry pillars were dismantled by orders of Government and replaced by stone monoliths, which work was done under the immediate supervision of the Deputy Commissioner.

(*b*) *Bahraich.*—The frontier line from Hathiákund Núla on the east to the river Girwi on the west was entirely cleared of grass and shoots, &c.

(*c*) *Gonda.*—The 30 feet broad neutral strip on the Nepal frontier was cleared and repaired.

CHAPTER II.

SURVEYS, WORKING PLANS AND ANNUAL PLANS OF OPERATIONS.

10. *Valuation Surveys, Circle.*—The usual measurements of the trees to ascertain the rate of growth of sál were made in Pilibhít, Bhira and Kheri (trans-Sarda).

11. *Land Surveys.*—No extensive land survey was undertaken during the past year. The disputed boundary near Kharáinta in Bhira was surveyed, and the land proposed to be exchanged with Mr. Sircar; the Government land was found of greater extent than that which Mr. Sircar proposed to give, so the matter is in abeyance. Small surveys were made in Bahraich for the proposed exchange of lands; also in Gonda, in the Nawábganj forest, for the proposed exchange for obtaining sál bearing lands and giving up inferior forests for a Barwár settlement.

12. *Working Plans.*—The Kheri and Gorakhpur Working Plans have remained incomplete owing to my illness during the hot weather and rains of last year, and the heavy works during the working season; but I hope to complete them after the annual report and the budget are off my hands. I have had to do these working plans in addition to my own work as Conservator: if I had had a working plans officer to help me, I could have got them off before. I have, however, to remark that according to the experience I have gained after some 26 years working Indian forests that to lay down an elaborate and fixed working plan until—

1*st.*—The exact rate of growth is known;

2*nd.*—The exact amount of stock is known;

3*rd.*—The demand is equal to, or in excess of the supply;

4*th.*—The money requirements and the requisite labour can always be obtained;

is pedantic and impracticable.

The failures in working plans in other circles that had to be severely animadverted on in the Local Government's review last year were greatly owing to these points not having been carefully considered. The working plans were drawn up by officers trained on the continent of Europe and supposed to be well acquainted with working plans; the working plans passed through the office of the Superintendent of Working Plans, and were approved of by the Inspector-General of Forests. I will send in the Kheri and Gorakhpur working plans as ordered, but I still think that the proper way to manage forests until the four great desiderata above-named are obtained is to lay down a general principle; to portion out (as near as possible) the work to be undertaken during the coming year (annual plan of operations), and to work up to the proposed annual plans of operations as far as circumstances will allow.

13. *Old Kheri working plan.*—The felling of 2,500 trees of the old Kheri working plan was adhered to, 2,500 *first class selected* trees, and not 2,500 *first class* trees of Mr. Broun's enumeration; a system of felling which proved to be bad in the fellings of January 1888.

13*a*. *Annual Plans of operations.*—Details will be found in Chapter IV.

CHAPTER III.

PROTECTION AND IMPROVEMENT.

I.—Establishment.

14. *Superior Staff.*—The charges in the superior establishment during the year were as below :—

Charges.	Officer in charge.	Remarks.
Oudh Circle ...	Captain Wood, Conservator. Mr Ponsonby, Deputy Conservator.	Mr Ponsonby officiated during Captain Wood's absence on privilege leave from the 15th July to the 4th September 1889 ; Mr. Ponsonby at the same time held charge of Bhira and Pilibhít.
Pilibhít	Mr. Ponsonby, Deputy Conservator ; Mr. Hill, Assistant Conservator.	Mr Ponsonby in charge till the 8th February 1890, and Mr. Hill from the 9th February to end of the year.
Bhira	Same as Pilibhít ...	Same as Pilibhít.
Kheri	Mr Allan, Deputy Conservator.	Whole year assisted by Mr Hill till the 23rd January 1890.
Bahraich	Mr Rebsch, Officiating Deputy Conservator.	Whole year.
Gonda	Mr. Karuna Nidhan Mukarji, Sub-Assistant Conservator.	Whole year, except for three months, when Mr. Mukarji was absent on privilege leave from the 20th June to 25th September 1889, and Mr Rebsch held charge of the Gonda Division in addition to his own duties.
Gorakhpur	Mr. Campbell, Officiating Deputy Conservator.	Whole year (except from the 3rd October to the 19th October, when he was on privilege leave and the charge was held by Mr. Raghunath Pathak), assisted by Mr Raghunath Pathak, Sub-Assistant Conservator, except from the 16th June to the 24th July 1890, when the latter was absent on privilege leave.
Bahramghát ...	Mr Kanhya Lal, Sub-Assistant Conservator. Mr. Raghubar Dayal Bajpai, Superintendent, Government Timber Depôt and Saw Mills.	Mr. Kanhya Lal was in charge till the 31st October 1889, when he retired on a pension. In charge from the 1st November 1889 to the end of the year.

Mr. Ponsonby was ill the greater part of the cold weather, and had to be sent to England very ill in February.

Nothing was finally decided during the year regarding the strengthening the superior staff by giving Sub-Assistant Conservators and superior rangers, though since the close of the financial year two Sub-Assistant Conservators have been sanctioned. One of these posts will probably be filled shortly, the other will have to remain in abeyance till some passed pupil of the Dehra School is obtained to fill it; at present there is no one qualified.

15. *Subordinate Staff.*—The revised establishment was sanctioned during the year, and came into force from the 1st October 1889. The present staff consists of—

	Annual cost. Rs.
6 Rangers	4,800
13 Foresters	4,200
150 Forest guards	13,680
1 Native Doctor	360
Total	23,040

The former establishment cost Rs. 18,120 and was supplemented by an establishment charged to works : even the present sanctioned territorial establishment is supplemented by forest guards who are not on the permanent establishment. This establishment is still too weak, as the subordinate staff was estimated for as part of the scheme for Sub-Assistant Conservators and superior rangers, which part of the scheme has not yet been sanctioned.

16. *Dehra School.*—The two native forest apprentices referred to in the report of 1887-88 (para. 15) have been provided with rangerships. David Barrow, the Native Christian Forest Apprentice, did not pass out in March, and has had to be kept on for another year at a cost to Government of about Rs. 500. After David Barrow has been provided for we must be careful about sending any more men, as we may not have vacancies, all the rangers but one being young men and only lately promoted to the ranger's grade.

Two private students, Messrs. Knowles and Wadley, went in July 1890 to the Forest School in hopes of getting appointments in the Sub-Assistant Conservator's grade. Mr. Knowles served on the temporary establishment for sleeper and fire conservancy operations in 1887-88, and Mr. Wadley served about seven months on fuel operations and fire conservancy in 1889-90.

II.—General Protection and Breaches of Forest Law.

17. *General protection.*—In Pilibhít protection as regards the limiting of forest rights is being done on paper; and firing, as shown last year, has been prohibited in the restricted compartment; but Mr. Hill reports as below :—

"The 12 restricted compartments were closed against firing and grazing by Local Government Notification No. $\frac{726F.}{481-42}$ of 14th November 1888, but this is altogether disregarded by the inhabitants of pargana Puranpur. Almost all the restricted compartments have already been burnt, and no assistance received from the villagers for putting out the fires."

I have before impressed upon Government the necessity of having a separate officer for Pilibhít, even though he be only a Sub-Assistant, somebody is required constantly on the spot; whereas the charge of Pilibhít with Bhira is a very straggling charge, and the officer's time is principally taken up in Bhira with fuel and other revenue operations at the extreme end most distant from Pilibhít, *viz.*, at Gola Gokarannath. The other divisions will improve more rapidly when an efficient superior staff is sanctioned.

18. *Breaches of Forest Law, Circle.*—The results as compared with 1888-89 are as below :—

"A" cases taken into Court.

Year.	Prosecutions.			Convictions	Acquittals.	Cases pending at close of the year.
	Pending	New cases.	Total.			
1888-89	...	74	74	70	4	
1889-90	...	69	69	63	6	
Difference ...	...	—5	—5	—7	+2	

19. *Breaches of Forest law, Divisional.*—There is a decrease in the number of cases taken up for prosecution in a court of law. The greater number of cases are in the Bahraich and Gonda Divisions, where there is much illicit grazing and unauthorized fellings as reported in past years.

20. *Compounding offences.*—The detail of cases disposed of under section 67 of the Forest Act is given below :—

"B."

Year.	Prosecutions.			Convictions.	Acquittals.	Cases pending at the close of year.	Amount of compensation realized.
	Pending.	New cases	Total				
							Rs. a. p.
1888-89... ...	...	113	113	109	3	1	1,186 13 0
1889-90... ...	1	83	84	80	4	...	1,071 6 0
Difference ...	+1	—30	—29	—29	+1	—1	115 7 0

There is a decrease in the number of cases compounded by Divisional Forest Officers during 1889-90; the greater number of cases, *viz.*, 70 cases against 207 persons, are in the Gorakhpur Division, where there are no three mile privileges; on the other hand, in Kheri there was only one case compounded, as the inhabitants of the adjoining villages are mostly Tháru, who get everything, including grazing, free, or are entitled to free produce for building and domestic requirements, so they have no inducement to commit offences.

The total amount realized from cases compounded is Rs. 1,071-6-0 against Rs. 1,186-13-0 of last year. Of the total amount (Rs. 1,071-6-0) realized during the year some Rs. 180-12-0 were paid as rewards, leaving Rs. 890-10-0 to the credit of Government.

III.—Forest Fires.

21. *Forest fires.*—The year has been an exceedingly dry one; the rains of last year stopped early, and beyond a few slight showers there were no winter rains; but on the whole the present year has been more favourable to fire conservancy than the last one.

22. *Fire conservancy, Circle.*—The following table shows the results of fire conservancy operations from 1st July 1889 to 30th June 1890:—

Divisions.	Area attempted to be protected	Failures.	Actually protected.	Cost.	Cost per acre.	Remarks.
	Acres.	Acres.	Acres	Rs.	Rs.	
Pilibhít	43,778	16,375	27,403	1,705	0 0 11·94	
Bhira	46,016	579	45,437	1,193	0 0 5·04	
Kheri	71,880	1,340	70,531	3,857	0 0 10·49	
Bahraich	157,760	288	157,472	3,426	0 0 4·17	
Gonda	99,137	10,237	88,900	739	0 0 1·59	
Gorakhpur	76,770	...	76,770	2,162	0 0 5·40	
Total, 1889-90 ...	495,341	28,828	466,513	13,082	0 0 5·38	
Total, 1888-89 ...	487,919	50,706	437,213	11,525	0 0 4·49	
Difference ...	+7,422	—21,878	+29,300	+1,557	+0 0 0·89	

The area attempted during the year was larger by 7,422 acres than in 1888-89, and the cost showed an increase of 0·89 pies, or say about 9-10ths of a pie per acre in excess of the cost last year. The increase was due to extended fire conservancy operations (trace firing and grass cutting) and the entertainment of extra establishment on account of the dryness of the season. The expenses in Pilibhít are high, and the arrangements require improvement. The charges in Kheri are high, but the value of the stock insured is worth many times what it is in Pilibhít.

About 5·82 per cent. of the area attempted was burnt.

23. *Fire Conservancy, Divisional; (a) Pilibhít.*—Attempted 43,778 acres, the same as last year; failures 16,375 acres, principally due to the burning of 12 compartments of the open forest in pargana Puranpur. Owing to its contiguity to these restricted and

unrestricted compartments it is very difficult to protect the Maina Kote closed block from fire. (*b*) *Bhira.*—Attempted 46,016 acres against 38,594 of last year; failures 579 acres. There were 5 fires; the first is said to have come from the fields of Siramau village; the second is said to have been occasioned by the contents of a *chilam* having been turned out in or near the grass by some traveller; the third, fourth and fifth fires were the acts of incendiaries. (*c*) *Kheri.*—Attempted 71,880 acres, the same as last year. Owing to the previous 5 years' successful protection, there was but little grass in the compartments burnt and the fire did little damage to the young tree growth: 480 acres were burnt in compartment 62,—228 acres were burnt in compartment 16,—641 acres were burnt in compartment 17, in all 1,349 acres. The fire is reported to have been caused by careless firing of grass in the *phantas.* (*d*) *Bahraich.*—Attempted 157,760 acres, the same as last year; failures, 288 acres. Only one fire took place on the northern edge of the Charda forest, adjoining the Nepal frontier, which was soon put out. The privileged villagers again showed great reluctance to render any assistance. (*e*) *Gonda.*—Attempted 99,137 acres, the same as last year; failure, 10,237 acres. There were several fires, said to have been caused partly by incendiaries and partly from fire spreading from the Nepal forests. Some of the fires are suspected to have been caused by privileged villagers. (*f*) *Gorakhpur.*—Attempted 76,770 acres, the same as last year. The fire conservancy this year has been a complete success; not a single acre of forest was burnt. This is greatly due to the Collector, Mr. Roberts, of Gorakhpur, taking a lively interest in fire conservancy by exercising better control over the firing of the private forests adjoining those of Government; and the railway authorities have also taken greater precautions while passing their trains through Government forests.

The Nepalese authorities have done nothing towards preventing fire by giving notice to local forest officers of their intention to fire their forests. I think the attention of the Nepal Darbár might be again drawn to the subject.

There were no areas that escaped fire without special means being adopted, except 200 acres in the Domakhund forests of the Gorakhpur division, which are given up entirely for grazing.

IV.—Grazing and Fencing.

24. *Grazing and fencing: grazing.*—The table below shows the number of cattle grazed and the areas closed against grazing:—

Divisions.	Total area of reserved forests in acres.	Area actually closed against grazing.	Area open to grazing.	Number of cattle grazed.	Remarks.
Pilibhit ...	97,045	43,778	53,267	17,318	3·07 acres a head.
Bhira	96,651	45,504	51,147	13,086	3·91 „ „
Kheri	168,296	70,880	97,416	74,878	1·30 „ „
Bahraich	208,021	68,480	139,541	85,322	1 63 „ „
Gonda .. .	99,137	52,140	46,997	46,181	1 02 „ „
Gorakhpur	100,556	67,000	33,556	42,297	0·79 „ „
Total ...	769,706	347,782	421,924	279,082	1·36 „ „

The grazing has again increased in Gorakhpur, as all the landowners have taken to protecting their grass, for they make more money by keeping it for thatching purposes, and hence more cattle come to graze in the Government forests. The grazing is becoming scarcer, and it is now desirable to take up much of the uncultivated portions of the Majhar and the Domakhund forest villages (so called) for grazing purposes. The grazing in all other divisions has decreased. The new grazing rules, for Oudh proper, under Government Notification No. $\frac{705F.}{537-19}$ of 27th May 1889, came into force from the 1st October 1889. It is too early as yet to report on how the new rules work, but as far as it can be discovered from the divisional reports, it appears that so far no

difficulty has been met with in the Kheri and Gonda districts; but, on the other hand, the forest officer, Bahraich, reports that " the rules are not working at all smoothly. The whole of the grazing villages adjoining the forests object strongly to having their bulls and bullocks assessed for grazing dues, although, as a matter of fact, these animals use the forest as a grazing ground whenever they are not actually employed on field work.

" The wording of rules I and II has also caused some misunderstanding. Rule I says ' that unless a village agrees as a whole to graze, all the cattle of the village are to be excluded from the forests.' And rule II orders that the Forest Officer *shall* exempt from the payment of grazing dues all cattle which in his opinion never graze in the Government forests, so that if it is proved that one half of the cattle of the village *never* graze in the forests, he has no discretion except to exempt them and charge dues only on those which do graze. And yet this is in direct opposition to the intention of rule I, which clearly directs either that all the cattle of a village must graze or all be excluded."

The course hitherto followed by the Forest Officer has been under rule I, but the Deputy Commissioner holds that the Forest Officer is not acting up to the letter of the law, even if 99 per cent. of the villages are alone willing and not 100 per cent. The matter is now between the Deputy Commissioner and the Conservator, and if they cannot agree the matter will be referred to Government.

25. *Fencing.*—Nil; but I think some fencing will be required in the Bahraich Division, particularly in the Bhinga Subdivision. In Bhira poles have been erected round the Barauncha forest for barbed wire fencing.

26. *Good result of protecting grass.*—The result of protecting grass has again been good, both in Gorakhpur and Gonda, and yields a good revenue. The zamíndars in the Gorakhpur district are taking great interest in the protection of their grass.

V.—Natural Reproduction.

27. *Natural reproduction.*—Natural reproduction is very good in the fire and cattle protected areas.

(*a*) *Pilibhít.*—There was a heavy fall of sál seed throughout the greater part of the division, but owing to the heavy rains the ground was under water and the seeds rotted.

(*b*) *Bhira.*—No natural reproduction took place. Owing to the heavy rains, the seed rotted. Seedlings, however, are hardly required in the dense coppice forests, but they have been opened out in the compartments that have been successfully fire protected from 4 to 12 years.

(*c*) *Kheri.*—The sál reproduction is very good, and when we find a market we must have thinnings on them later on. The young growth is very marked in those parts where sleeper operations have lately taken place and where air and light have been admitted. Sissu is extending rapidly and requires thinning.

(*d*) *Bahraich.*—The reproduction in Nishángára forest is good, but in the Bhinga forest, as has been stated in many of the previous reports, is bad.

(*e*) *Gonda.*—Early in the winter of 1889-90 sál seedlings were visible all over the Nawábganj and Tulsipur sál forest. Many of these are still surviving in the closed areas and in favourable localities, but on the open grazing and dry lands they fast disappeared. Reproduction of arsaina and dháo is progressing most favourably, and where the growth is dense and healthy it will be advisable to cut out the old and crooked trees and dispose of them by sale to purchasers. Shisham and khair seedlings are also appearing on the banks of nalas and thriving under the influence of fire protection.

(*f*) *Gorakhpur.*—Reproduction is taking place particularly the last few years, and in the Nagwa and Sonári forests seedlings have sprung up into saplings, and arsaina in the grass plains is also doing well and requires protection to bring it up.

VI.—Artificial Reproduction.

28. *Artificial reproduction.*—The area of plantations in 1888-89 was 2,742 acres, from which 100 acres have been deducted in Gorakhpur on account of the area being swamped and the plants killed by borer insects. There were some 300 acres swamped by the rains in the Sakhwi forests (Gorakhpur), but they will be filled up in the cold weather. There were some 55 acres of cultural operations at the end of the year 1888-89, to which 18 acres have been added, making a total of 73 acres. The total cost for maintaining plantations and experimental sowings during the year was Rs. 3,746. (*a*) *Bhira.*—Fifteen acres were added to the sissu plantation at Marha, making a total area of 32 acres; 100 bambu plants were planted to fill up blanks. (*b*) *Kheri.*—The sissu in the sissu roadside plantation is not doing very well, I believe from the plants having been swamped when young; but bambus planted in 1882 and 1887 have formed into large clumps. (*c*) *Gonda.*—Four acres of experimental bambu sowing failed: the cultivation was not careful enough. (*d*) *Gorakhpur.*—The sissu planted at Ramgarh is coming up slowly. The bambus planted here are doing extremely well. The sissu planted at Sonari is not doing well; the plants are attacked by insects. The sissu plantation at Sakhwi has been a great success, and this year, owing to the embanking round the roots of the trees and seedlings, a great spurt has been given to their growth.

VII.—Yearly thinnings, removal of inferior species, cutting of climbers, &c.

29. (*a*) *Thinnings.*—*Bhira* thinnings were made in compartment XA. Strip fellings were continued in the Barauncha closed forest, which yielded 167,554 stacked cubic feet of timber and fuel. (*b*) *Gonda.*—Improvement thinnings and strip fellings were carried on over about 1,200 acres in the Rámgarh forest. Compartments C, D, E, F, G, H, J, K and L were worked. The strips were first made 20 feet broad and 60 feet apart from each other; but as the strips were thought too broad for the height of the crop, the strips were afterwards made 15 feet broad and 45 feet apart. The yield from these improvement fellings was about saplings sál 104,003, mahua 1,070 and 34,895 miscellaneous species which were converted into 726 stacks of fuel of 400 stacked cubic feet (or 100 maunds each) and 375 poles. (*c*) *Gorakhpur.*—Improvement fellings and thinnings over 255 acres were carried out in the west Lehra forest near the railway line, and 423 acres were operated on in block No. 2 of the Bhari Baisi forest. In the Rámgarh forests 348 acres have been thinned out. These operations will improve the forests immensely, as the former thinnings of past years have already improved the forests, letting the growth go to the straight poles that are left.

30. *Cutting of climbers.*—(*a*) *Bhira.*—Climbers were cut over an area of 2,300 acres, at a cost of Rs. 112-9-0, or 9 pies per acre. (*b*) *Kheri.*—Climbers were cut in compartments 21, 22 and 23 by the gang employed on marking trees for sleepers. (*c*) *Bahraich.*—Climber cutting was done over an area of about 500 acres at a cost of Rs. 67. (*d*) *Gonda.*—Climbers were cut in sections III and IV, comprising an area of 1,640 acres at a cost of Rs. 66-1-0, or about 8 pies an acre. (*e*) *Gorakhpur.*—The climber cutting was carried on over an area of 30,345 acres, at a cost of Rs. 1,471-2-6, or about 9·3 per acre. (*f*) *Pilibhít.*—No climbers were cut, owing to Mr. Ponsonby's illness, and in Bahraich Mr. Rebsch had too much work in his hands cutting out dead and dying trees and improving the revenue.

VIII.—Experiments.

31. *Experiments and exotic trees.*—The Mahogany seedlings planted some years ago in the Bahramghát Depôt yard are doing well, and have attained a height of from 12 to 17 feet and are strong and healthy.

32. *District Arboriculture.*—The roadside plantations in the Gorakhpur district are doing well, though on some roads they have been abandoned owing to the opposition of zamíndárs and tenants. The plantation at Rámgarh proved a source of revenue, as the sale of fruit fetched some Rs. 422.

IX.—Communications and Buildings.

33. *Roads.*—During the year 44 miles 5¾ furlongs of new roads were made as below :—

	Miles.	Furlongs.
Pilibhít	4	3¾
Bhira	3	4
Bahraighát	0	6
Gonda	36	4¼
Total	44	1¾

An abstract statement of existing roads and lines is given in Appendix II. The expenditure on roads and bridges as compared with last year was as below :—

Divisions.	1888-89.	1889-90.	Remarks.
	Rs.	Rs.	
Pilibhít	549	944	
Bhira	1,594	523	
Kheri	8,654	6,037	
Bahraighát	199	190	
Bahraich	4,524	1,862	
Gonda	667	839	
Gorakhpur	306	364	
Total ...	16,493	11,359	

There are now some 1,321 miles of roads in the Oudh Circle, which have influenced the revenue greatly and facilitated traffic.

All the existing roads and lines were repaired and put in order as well as bridges on them. The wooden bridge over the Soheli river was maintained as usual. The bridge of boats over the Sarda river was kept up as usual, and has been of great use both to forest and Nepal traffic. The receipts and expenditures for the past three years are as below :—

	1887-88.	1888-89.	1889-90.	Total.	Remarks.
	Rs.	Rs.	Rs.	Rs.	
Revenue	4,768	3,942	3,714	12,424	
Expenditure	3,210	4,236	3,687	11,133	
Surplus ...	1,558	294	27	1,291	

The expenditure includes the upkeep of the bridge and the safe custody of boats during the rains, as well as annual compensation of Rs. 500 paid to the district.

34. *Buildings.*—The work on buildings was done during the year as below :—(*a*) *Pilibhít.*—A new office with kachcha bricks and tiled roof was made at Mahofe. (*b*) *Kheri.*—A new 2nd class rest-house has been commenced at Chandan Chauki ; a range of out-offices has been finished at Changa nálá. (*c*) *Bahraich.*—The 2nd class double storeyed house at Bhachkahi in the Bhinga range was nearly completed. (*d*) *Gonda.*—The first class rest-house at Janakpur was nearly completed, and a 2nd class rest-house at Sangárha is under course of construction ; the work on its out-houses is nearly finished. (*e*) *Gorakhpur.*—The Lachmipur (Kulhua) house is nearly completed, and outhouses at Chaumukha are in course of construction. The materials for other houses are being collected.

All the other existing houses and buildings in all the divisions have been put in thorough order. The expenditure on buildings was as below :—

	Rs.
1888-89	12,316
1889-90	14,287

35. *Wells.* (*a*) *Bhira.*—A 3 feet *patti* well for fire conservancy was made. (*b*) *Kheri.*—Four wells are in course of construction. (*c*) *Bahraich.*—A well at Gandhi Chauk was completed, and one well at Bhachkahi is in course of construction.

(*d*) *Gonda.*—Materials for wells have been collected. (*e*) *Gorakhpur.*—The well at Nichlaul was completed, and a well at Lachmipur (Kulhua) will be built up.

All the existing wells in the circle were cleared out and repaired. The total cost on wells was as below :—

	Rs.
1888-89	1,072
1889-90	1,446

There are at present 117 masonry, 9 *kachcha* and 4 wooden; total 130 wells in the circle.

36. *Rivers.* (*a*) *Kheri.*—The Soheli river was as usual cleared of snags, at a cost of Rs. 320, and made easy for rafting logs and sleepers. (*b*) *Gorakhpur.*—The rivers Rohin and Pias were cleared where rafting was going on. (*c*) The Rapti drift was carried out successfully and brought in a revenue of Rs. 4,392 against Rs. 1,837 expenditure, giving a surplus of Rs. 2,555.

The control of the great Gandak river was carried out successfully and gave a revenue of Rs 11,638 against Rs. 4,603 expenditure, giving a surplus of Rs. 7,035. Both Mr. Campbell, the Divisional Forest Officer, and Mr. Hose, Joint Magistrate, are of opinion that European supervision is necessary for the drift operations of the great Gandak, which they expect would give a surplus of about Rs. 40,000 if properly managed The income from the collection of drift timber from the Sarda, Chauka, Ghogra, Kauriála and Sarju rivers, under control of Bahramghát divisional officer, was Rs 4,992 against Rs. 3,250 of last year, and the expenditure was Rs. 1,565 against Rs. 1,619 of last year. The increase in revenue is due to better control; and the revenue would be much increased if it were not for river thieves and large traders supposed to be respectable persons buying drift timber at cheap rates, and also tampering with the Government servants.

CHAPTER IV.

YIELD AND WORKING.

37. *Detail.*—The detailed yield is given in forms 54 and 55 : the main features are also given in Appendix V.

(I).—Departmental Operations.

38. *Selection fellings of regular working plans, Circle.*—The only regular selection fellings took place in the Kheri Division, in compartments as below :—

No. of compartments.	Sál.	Arsaina.	Remarks.
50	...	493	
51	152	67	
52	400	145	
53	606	190	
54	1,342	48	
Total ..	2,500	943	

39. *Selection fellings, Divisional.*—In Kheri the regular selection fellings were 2,500 sál and 943 arsaina trees, converted into 3,816 logs and 340 pieces, yielding 190,180 cubic feet of timber. Of these logs and those of the former season's fellings 5,201 logs were carted to depôt; 4,093 logs were rafted to Shitába, and 5,500 logs were rafted from Shitába to Bahramghát.

40. *Improvement fellings.*—(*a*) *Pilibhít.*—Fuel operations were carried out at Nachnighát in open compartment No. 3, and a few stacks were cut in closed forest at Naghphan Rasuia, yielding 280½ stacks*=about 139,750 cubic feet of firewood stacked cubic feet. (*b*) *Bhira.*—Strip fellings were carried out in the Barauncha closed forest and yielded 617,979 stacked

*The stacks average 450 cubic feet. This depends much on the quality of the fuel. Three stacked cubic feet are about equal to one solid foot or 1½ solid cubic foot equal to one maund.

cubic feet of fuel, most of which was removed by purchasers and 1,846 poles Thinnings done in compartment X*a* yielded 35,328 solid cubic feet of fuel and charcoal. (*c*) *Kheri.*—Improvement fellings were carried out, and the following trees (dead, crooked and deteriorating) were felled for sleepers and scantlings :—

No. of compartment.	Sál.	Arsaina.	Remarks.
21	5 106	2,150	
22	3,463	746	
23	2,459	747	
29	991	78	
30	40	...	
34	..	102	
35	...	704	
36	..	1,513	
37	12	...	
Total ...	12,131	6,040	

giving an outturn of—

Description.	Passed.	Rejected.	Total.	Cubic feet.	Remarks.
Sál sleepers	71,110	15,663	86,773	130,159	
Arsaina „	50,114	11,535	61,649	92,473	
Signal posts ...	...	...	...	124	
Sál scantlings ...	...	...	...	4,486	
Arsaina „	...	...	...	10	
Total ...	121,224	27,198	148,422	227,202	

The average yield per tree was 12½ cubic feet all over, or 11·1 for sál and 15·3 for arsaina. The whole of this was carted from the forests to forest depôt as soon as sawn, and from it and sawings of previous year, 26,771 sál sleepers (6′ × 8″ × 4½″) were carted from Dudua to Mailáni, 489 sál sleepers (6′ × 8″ × 6″) were carted from Dudua to Mailáni, 10,960 arsaina sleepers (6′ × 8″ × 4½″) were carted from Dudua to Mailáni, 10 signal posts and 3,734 cubic feet sál were carted to Mailáni, 21,550 cubic feet sál scantlings were carted from Dudua to Gola, and 22,508 cubic feet sál scantlings were railed from Gola to Lucknow, 11,913 sál and 17,194 arsaina sleepers were rafted to Shitába, and 15,329 were boated on from Shitába to Bahramghát. (*d*) *Gonda.*—The yield from thinnings and strip fellings was 290,400 stacked cubic feet (about 72,000 maunds) of fuel and 375 thatching poles. Of the fuel 406 wagon loads (a wagon load is equal to about 100 maunds) were railed down to Lakarmandi and 120 wagons to Gonda. The demand for fuel is increasing. We shall have to continue thinning operations this year. (*e*) *Gorakhpur.*—11,538 ill-grown, tapped and crooked trees were felled for sleepers, giving an outturn as below :—

Material.	No.	Remarks.
Sál sleepers	23,445	
„ logs	300	
„ pieces	2,905	
Off cuts .. ... mds	4,000	
Total No. ...	26,650	
Maunds ...	4,000	

The outturn from the improvement thinnings was as below :—

	Number.	Solid cubic feet.	Remarks.
Sál timber	6,545	7,910	
Arsina ,, ...	10	16	
Miscellaneous	482	1,603	
Firewood ... ... mds.	29,895	65,110	
Total ...	36,932	74,639	

The improvement fellings have been a great success this year owing to there being a good demand by the Locomotive Department of the railway, by sugar refiners, indigo manufacturers, brick burners and others; and the clearances were as below :—

	Number.	Solid cubic feet.	Remarks.
Sál	3,453	6,934	
Miscellaneous	3,333	3,690	
Firewood ... ... mds	37,396	74,792	
Total ..	44,182	85,416	

giving a total outturn of 67,152 cubic feet of timber and 465,388 of firewood, grand total 532,540.

41. *The outturn of timber, firewood and other minor produce.*—The outturn is given in forms Nos. 54 and 55, an abstract of which is shown below, as per revised form No. 54 ordered by the Government of India :—

Description.	Government agency.		Purchasers.		Right holders and free grantees.		Total.	
	1888-89.	1889-90	1888-89	1889-90	1888-89	1889-90	1888-89	1889-90.
Timber in logs ... c. ft.	225,681	220,647	33,976	229,009	...	13	259,657	449,669
,, poles ... ,, ,,	20,206	50,078	343,199	337,257	13,576	1,148,249	376,981	1,535,584
Sawn or squared timber ,, ,,	38,831	233,241	...	3,634	...	16,352	38,831	253,227
Miscellaneous	73,071	23,857	140,264	60,722	1,564,458	149,884	1,786,793	234,463
Fuel	270,954	1,052,577	820,634	460,128	569,092	382,408	1,666,680	1,895,173
Total ...	634,740	1,580,400	1,347,073	1,090,750	3,147,120	1,696,906	4,128,942	4,308,116

The increase under the Government agency is due to sleeper operations undertaken and more fuel cut departmentally in Gorakhpur and Bhira for supplying railways and to meet other demands. The decrease under exploitation by purchasers is due to less poles and firewood removed by the purchasers in Gorakhpur and Pilibhit, whilst, on the other hand, the dry timber removed by purchasers in Bahraich was more than in previous years; and the decrease under "right holders and free grantees" is due to less removal of free produce by the concessionists in Kheri and Bahraich. For the sake of further comparison I give below a summary under the old form 54 and the Local Government's summaries :—

Description.	Selection fellings.		Thinnings and improvement fellings.		Clearances.		Total.	
	1888-89.	1889-90	1888-89.	1889-90.	1888-89	1889-90.	1888-89	1889-90.
Timber ... c. ft.	259,660	248,959	57,257	240,753	858,360	...	1,175,477	2,472,943
Poles and saplings „ „	...	...	13,506	...	1,201,287	1,983,231	1,214,793	
Drift	...	...	...	...	71,995	...	71,995	
Total, timber ...	259,660	248,959	70,763	240,753	2,131,842	1,983,231	2,462,265	2,472,943
Total, firewood and charcoal.	...	...	373,738	727,091	1,202,942	1,168,082	1,666,680	1,895,173
Total timber, firewood and charcoal.	259,660	248,959	444,501	967,844	3,424,784	3,151,313	4,128,945	4,368,116

The removal of the above by different agencies has already been given in para. 41.

42. *Minor produce* and grazing removed and utilized :—

Description.	By Government agency.				Purchasers.				Right-holders and free grantees.				Total.			
	1888-89.		1889-90.		1888-89.		1889-90.		1888-89.		1889-90.		1888-89.		1889-90.	
	Quantity.	Value.	Quantity	Value.	Quantity	Value.	Quantity	Value.	Quantity	Value.	Quantity	Value.	Quantity	Value.	Quantity.	Value.
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Bamboos ...		...	..	...		186		217		..		...		186		217
Minor produce ...		11,274	..	34,944		39,488		47,950		12,473		12,596	..	63,234		95,490
Grazing ...		...	..	...		46,181		45,372		2,720		1,720		48,001		47,092
Total ...	..	11,274		34,944		85,855	...	93,539		15,192		14,316		112,321		1,42,799

The increase in removals by Government agency is on account of baib grass collected and sold in the Bahraich Division to the Paper Mills at Lucknow. There is also an increase in the removals by purchasers, which is due to manufacture of catechu in the Kheri, Gonda, Bhira and Bahraich Divisions, and sale of grass in Gorakhpur, and to the grazing realized on account of the Balrampur lease for two years, whilst the right holders and free grantees removed less produce than last year.

43. *Total yield of timber, Circle.*—The total yield of timber is given below :—

Description.	1888-89.		1889-90.		Difference.	
	Number	Cubic feet.	Number.	Cubic feet.	Number.	Cubic feet.
Selection fellings, *i.e.*, fellings of mature trees.	3,317	259,660	23,044	248,959	+ 20,263	— 10,701
Thinnings	286,329	70,763	34,494	240,153	— 241,835	+ 169,390
Clearances	916,375	2,060,041	1,395,389	1,875,112	+ 479,014	— 184,029
Total, timber ...	1,206,021	2,390,464	1,452,927	2,364,324	+ 246,906	+ 26,240
Add drift timber	...	71,802	...	108,119	...	+ 36,317
Add firewood	...	1,666,680	...	1,895,173	...	228,493
GRAND TOTAL ...	1,206,021	4,128,946	1,452,927	4,367,516	246,906	238,570

This was exploited as shown in para. 41. This distributed over the whole area of 769,706 acres of the circle gives a result of 5·67 cubic feet per acre; but actually taking the tree forests (about 460,800 acres), the result comes to 9·43 cubic feet per acre of tree forest.

44. *Bahramghát Depôt.*—The following table gives the comparative results of receipts and execution of indents for timber :—

Year.	Balance at commencement of the year.	Received during the year.	Total.	Executed during the year.	Cancelled.	Total.	Balance.
1888-89	5,511	44,553	50,064	40,288	826	42,993	6,245
1889-90	6,245	71,021	77,266	58,761	3,295	62,056	15,210
Difference ...	+734	+26,468	+27,202	+9,523	+ 2,469	+19,063	+8,965

The quantity of indents received during the year was greater than that of last year, owing to a greater demand for sleepers for the Delhi Ambala and Kalka Railway and the Indian Midland Railway, and timber for Public Works and Jail Departments as well as the Fatehgarh Gun Carriage Agency. Rejected timber, offcuts, scantlings and crooked logs were sold by the usual periodical sales, and the prices obtained per cubic foot ranged from 5 annas to 1 rupee per cubic foot.

45. *Stock.*—The value of timber and fuel in stock at the commencement and the close of the year is given in the following table, abstracted from forms Nos. 57 and 57"*a*" and "*b*": —

Description.	On hand at commencement of the year.		Balance at close of the year.		Difference in value.		Remarks.
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.	
		Rs		Rs.	Rs.	Rs	
Timber c.ft	1,300,495	4,75,461	850,032	4,55,581		19,880	
Firewood .. mds.	65,734	9,905	148,095	27,066	17,161	...	
Minor produce	2,218	1,428	13,182	12,802	11,371	...	
Stock as per form No. 17B,	64,480	1,93,528	98,663	1,97,762	4,234	...	
Total ...	1,432,927	6,80,322	1,104,972	6,93,211	12,889	19,880	

The value of timber stock has been decreased, whereas the value of firewood, minor produce and other stock has increased owing to firewood and baib grass remaining in stock unsold and some not paid for during the year.

The sleepers and scantlings and offcuts cut in the forest, but not brought in the depôt, have not been taken in the account; otherwise the value of the timber would have been increased.

46. *Deterioration in value of stock.*—As desired in para. 246 of the Forest Department Code, 3rd edition, I have made allowance for deterioration in the value of stock, though, owing to the additional value of buildings and other stock, there is an increase in the value of live and dead stock shown in form No. 57B.

47. *Removal of produce by purchasers.*—The removal of produce of all kinds is given in forms Nos. 54 and 55, and a summary is given below and compared with the results of last year :—

	1888-89.		1889-90.		Remarks.
	Quantity.	Value.	Quantity.	Value.	
		Rs.		Rs.	
Timber	217,909				
Poles and saplings	308,042	96,125	630,622	1,56,196	
Drift timber	488			..	
Firewood and charcoal	820,634	10,143	460,128	6,317	
Minor produce including bambus ...	...	39,674	...	48,168	
Grazing dues	...	46,181	...	45,372	
Total ...	1,347,073	1,92,123	1,090,750	2,56,053	

There has been more timber removed by purchasers from the forests, there has been less firewood removed by purchasers, as the railways prefer purchasing fuel from the Forest Department direct : there have been increased sales of minor forest produce, especially catechu, in Kheri, Bhira, Bahraich and Gonda, and hides and horns in Bahraich and Gorakhpur. The decrease in grazing dues is due to some of the revenue from grazing dues not having yet been realized in the Bhira and Bahraich Divisions owing to the lists sent to the Deputy Commissioners not having yet been checked and returned, and some revenue remains unrealized on account of a discussion of the wording of the new rules for grazing dues in the Bahraich Division, though, on the other hand, more cattle grazed in the Gorakhpur and Gonda Divisions.

48. *Divisional detail of timber.*—Firewood, minor produce and grazing dues removed by purchasers is given below :—

	1888-89.										1889-90.									
	Timber.		Firewood and charcoal		Minor produce.		Grazing		Total.		Timber		Firewood and charcoal		Minor produce.		Grazing		Total.	
	Quantity	Value.	Quantity	Value.	Quantity.	Value.	Quantity	Value.	Quantity	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity	Value.
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs		Rs.
Pilibhít ...	9,117	1,330	56,092	3,121	...	1,578	..	1,242	65,209	7,271	9,779	1,567	36,390	992	...	1,278	...	1,192	46,169	5,029
Bhira ...	14,805	444	175,360	497	..	162	...	1,925	190,165	3,028	10,537	601	52,760	348	...	729	...	561	63,207	2,239
Kheri ..	45,409	12.293	27,361	342	...	10,317	...	10,969	72,770	33,931	70,264	21,732	27,320	380	...	14,469	...	10,968	97,584	47,549
Bahramghát ..	...	...	...	.	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	..
Balrasch ...	375,057	71,222	56,054	1,371	..	5,742	...	15,912	431,111	94,247	452,996	1,03,395	118,507	1,455	...	6,895	...	9,180	571,503	1,20,925
Gonda	56,433	8,244	287,632	2,162	...	6,386	...	7,092	344,065	23,884	76,422	16,547	150,359	1,455	...	8,229	...	12,978	226,781	39,209
Gorakhpur ...	25,618	2,592	218,135	2,650	...	15,489	...	9,021	243,753	29,752	10,624	12,353	74,792	1,686	...	16,568	...	10,492	85,416	41,099
Total ...	526,439	96,125	820,634	10,143	...	39.674	...	46,181	1,347,073	1,92,113	630,622	1,5619,5	460,128	6,316	...	48,168	...	45,371	1,090,750	2,56,050

49. *Free grants of forest produce.*—The detail of free grants of forest produce is given in forms Nos. 54 and 55 and Appendix 1*a*, an abstract of which is given below :—

Description.	1888-89.		1889-90.		Remarks.
	Quantity.	Value.	Quantity.	Value.	
		Rs.		Rs.	
Timber	15,909	...	...	..	
Poles and saplings	1,562,125	87,274	1,314,498	72,078	
Firewood and charcoal	569,092	5,024	382,468	3,277	
Minor produce	...	12,472	...	12,596	
Grazing dues	...	2,720	...	1,720	
Total ...	2,147,126	1,07,490	1,696,966	89,671	

From the above table it will be seen that over 4½ lakhs of cubic feet timber and firewood were less removed by right holders and free grantees.

50. *Rights.*—With the exception of Pilibhít, there are no rights in any of the divisions of the Oudh Circle.

51. *Protected and District forests.*—There are no protected or district forests in the Oudh Circle.

52. *Catechu.*—The amount realized from the manufacture of catechu was as below :—

	Rs.
Kheri	12,408
Bhira	100
Bahraich	1,159
Gonda	3,455
Total ...	17,122

The mature khair trees are becoming fewer in number in Kheri, but large numbers of young trees are coming up, whereas in Bhira the catechu making was only commenced. The catechu manufacture in Bahraich was restricted. There need be no fear of work in the future for khairahas, as should khair fail or become scarce, they can make sál bark extract.

53. *Extract of sál bark.*—No extract was prepared this year, but 460 maunds of sál bark were stripped by Government agency and sent to Messrs. Cooper, Allen and Company, Cawnpore, for trial. I further allowed the company to take as much sál and arsaina bark from the felled fuel trees as it wished with a view to experimenting with it on a large scale as a tanning material; the results of their experiments are not yet known, the permission to remove the bark free of royalty expiring on the 25th February 1891.

54. *Imports and Exports.*—The imports of timber from Nepal appear to have been less than in previous years, probably due to frauds having taken place, and to the exhaustion of the forests in the vicinity of the Nepal sale depôts.

55. *Total yield in produce.*—The total yield in produce is given in forms Nos. 54 and 55, and an abstract is given below :—

Description.	1888-89.		1889-90.		More.		Less.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value
		Rs.		Rs.		Rs.		Rs.
Timber c. ft.	2,462,265	4,10,377	2,472,943	4,12,059	10,678	1,682	...	...
Firewood ..	1,066,080	36,000	1,895,173	67,997	228,493	31,997	...	...
Bambus ...	132	186	...	217	...	31	...	...
Minor produce ...	...	63,234	...	95,490	...	32,256	...	..
Grazing dues ...	...	48.901	...	47,092	...	...	...	1,809
Total ...	4,129,077	5,58,698	4,368,116	6,22,855	239,089	64,157	...	...

In the above statement there is an increase under timber, firewood and minor produce, whereas there is a falling off under grazing dues, which is due to the estimate of right holders' cattle having been taken much below the figures of last year. On the whole, there is an increase of Rs. 64,157 compared with total yield of last year.

To show the extent to which free grants and grazing rights are comprised in the above return, the following table shows the yield and value of the produce if it had been disposed of at the usual nominal rates. The privileged are shown in block type.

Description.	Cubic feet.	Rupees.	Remarks.
Timber	1,158,445 **1,314.498**	4,15,059 **72,078**	
Firewood	1,512,705 **382,468**	67.997 **3,276**	
Bamboos	...	217	
Minor produce	...	82,751	
	...	12,596	
Grazing...	...	45,859	
	...	1,720	
Free	**1,696,966**	**89,670**	
Other than free	2,071,150	6,08,383	

CHAPTER V.

Financial Results.

56. *Circle.*—The financial results of the year as compared with those of the five previous years are as below :—

	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs
Receipts	7,77,021	6,81,712	6,58,675	4,29,870	5,39,654	6,88,556	37,75,488
Expenditure ...	5,50,758	5,03,197	3,75,120	3,14,439	3,16,879	4,32,127	24,92,520
Surplus ...	2,26,263	1,78,515	2,83,555	1,15,431	2,22,775	2,56,429	12,82,968

The *receipts* of this year are greater than those of four previous years, which is due to sale of dead and dying trees in Bahraich, and of much old stock at Bahramghát. The *surplus* of the year is more than those of the past two years. The *expenditure* of the year is greater than those of the three previous years and is mainly due to sleeper operations taken in hand for the Bengal and North-Western, and Lucknow-Pilibhít Railways, for which, however, there are as yet no receipts from sleepers or scantlings.

57. *Receipts and expenditure under the three great heads of "I. Departmental operations," "II. Other Revenue" and "III. Formation, &c., of Forests."*

Year.	I			II.			III.	Net surplus.
	Departmental timber operations.			Other revenue.			Formation, protection and improvement of forests	
	Receipts.	Charges.	Surplus.	Receipts.	Charges.	Surplus.		
	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1888-89 ...	3,25,267	1,49,040	1,76,227	2,14,387	78,346	1,36,041	89,493	2,22,775
1889-90 ...	4,22,765	2,65,756	1,57,009	2,65,791	76,735	1,89,056	89,636	2,56,429
Difference ...	+97,498	+1,16,716	−19,218	+51,404	−1,611	+53,015	+143	+33,654

58. *Receipts under the different budget heads* are given below :—

Year.	I. Timber and other produce removed from forests by Government agency.	II. Timber and other produce removed from forests by purchasers.	III. Confiscated, drift and waif wood.	IV. Forests not managed by Government.	V. Miscellaneous.	Total.
	Rs.	Rs.	Rs.		Rs.	Rs
1888-89 ...	3,21,283	1,97,409	10,588	...	10,374	5,39,654
1889-90 ...	4,16,903	2,40,851	20,193	...	10,009	6,88,556
	+95,620	+43,442	+9,605	...	+235	+1,48,902

The increase in "R. I" is due to sale of old stock of timber at Bahramghát, sale of sleepers and Kheri scantlings: the increase under "R. II" is due to the sale of dead sál in Bahraich and of the produce of thinnings in Gorakhpur, Gonda and Bhira: there has been an increase under "R. III" on account of the better control and salving of drift timber in the Gorakhpur and Bahramghát Divisions: in "R. V" from increased traffic over the bridge of boats in Kheri.

59. *The divisional receipts and expenditures* are given below :—

Divisions.	Receipts. 1888-89.	Receipts. 1889-90.	Increase or decrease during the year.	Expenditure. 1888-89.	Expenditure. 1889-90.	Increase or decrease during the year.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direction	...	...	...	26,037	22,789	−3,248
Pilibhít	7,559	6,401	−1,158	23,089	23,224	+135
Bhira	15,197	17,170	+1,973	17,698	21,575	+3,877
Kheri	62,499	72,668	+10,169	1,21,009	1,84,616	+63,607
Bahramghát	2,43,741	2,88,054	+44,313	32,030	32,573	+543
Bahraich	1,15,768	1,49,893	+34,125	32,201	41,992	+9,791
Gonda	35,079	52,821	+17,742	19,278	24,696	+5,418
Gorakhpur	59,811	1,01,549	+41,738	45,536	80,762	+35,226
Total ...	5,39,654	6,88,556	+1,48,902	3,16,879	4,32,127	+1,15,248

Explanation of differences.

(*a*) *Direction.*—The decrease in expenditure was owing to no extra officer's pay being charged to this circle: last year Mr. Dansey's pay, while on leave, was charged to this circle.

(*b*) *Pilibhít.*—The falling off of revenue is due to stacks of fuel cut, but remaining unsold, and a large quantity of *baib* grass collected, not being credited during the year; the increased expenditure is due to more work done on roads and buildings.

(*c*) *Bhira.*—The increased revenue is on account of larger sales of fuel: the increased expenditure is due to more work done on fuel operations and collections of *baib* and *káns* grass. Rs. 205 were spent on purchase of tents.

(*d*) *Kheri.*—The increase in revenue is due to sale of scantlings from improvement fellings at Lucknow, and also increased sales of dry wood from forests. The increased expenditure is due to sawing up sleepers for the Bengal and North-Western, and Lucknow-Pilibhít Railways, for which a subsequent grant was obtained. The money provided for sawing scantlings has been spent on sleepers, as sawing of scantlings, except on indent, was considered inexpedient. Both operations could not well be undertaken at one and at the same time for want of supervision.

(*e*) *Bahramghát.*—The increased revenue is due to sale of sleepers and old scantlings, and the increase in expenditure is due to more indents being executed and to the building of a masonry shed at Lucknow.

(*f*) *Bahraich.*—The increase in revenue is due to a larger sale of timber and other produce removed from the forests by purchasers, "R.II"; and the increased expenditure is due to the export of baib or *bankas* for paper manufacture, and also to the construction of a new rest house at Bhachkawa.

(*g*) The increase in revenue in Gonda is due to the larger sale of *baib* grass, lime and fuel; and the increased expenditure is due to increased improvement fellings and cutting of *baib* grass and other items for the production of revenue.

(*h*) *Gorakhpur.*—The increase of revenue was from the sale of firewood to the railway and increased sales of grass; the increased expenditure was due to cutting up sleepers and conversion of the produce of thinnings into timber fuel and charcoal, the revenue from which will come in 1890-91.

60. *Circle expenditure "A," under different budget heads.*

The expenditure under "A" Conservancy and Works for this and past year is as below :—

Year.	I. Timber and other produce removed from forests by Government agency.	II. Timber and other produce removed from forests by consumers or purchasers.	III. Confiscated, drift and waif wood.	IV. Revenue of forests not managed by Government.	V. Rent of leased forests	VI. Live and dead stock.	VII. Communication and buildings.	VIII. Demarcation improvement and extension of forests.	IX. Miscellaneous.	Total.
	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.	Rs.	Rs.
1888-89 ..	1,22,550	13,768	5,114	...	...	6,560	29,882	28,895	4,016	2,11,295
1889-90 ..	2,41,249	12,040	7,096	...	...	5,479	27,093	30,465	2,042	3,25,463
	+1,18,699	−1,728	+1,982	...	...	−1,081	−2,789	+1,570	−1,974	+1,14,168

Explanation of differences.—"A.I." increased sleeper and fuel operations: "A.II" decrease, savings in temporary establishment and contingencies under this head: "A.III" increase, owing to extra supervision on drift timber: "A.VI" less expenditure, as no tools were purchased for the Bahramghát Saw Mills: "A.VII," decrease, less work undertaken, as pioneering work is nearly completed: "A.VIII," more work done on formation, protection and improvement of forests: "A.IX," decrease, less litigation, and savings under "Refunds" and "Other charges."

61. *Circle expenditure, "B. Establishments"*—For this and past year is given below :—

Years.	I. Salaries.	II. Travelling allowances.	III. Contingencies	Total.
	Rs.	Rs.	Rs.	Rs.
1888-89	86,644	13,709	5,232	1,05,585
1889-90	87,743	13,594	5,327	1,06,664
Difference	+1,099	−115	+95	+1,079

Cause of difference.—Increase under "B.I" is due to the promotion of officers and introduction of the revised subordinate scheme sanctioned by Government of India: decrease under "B.II" is due to less camping by officers and absence of Mr. Ponsonby on leave: increase under "B.III" is due to more expenses under contingencies.

62. *Cash profits of the year.*—The cash profits of the year were as below:—

	Rs.
Receipts	6,88,556
Expenditure	4,32,127
Cash surplus ...	2,56,429

63. *Profits of the year with assets.*—The following table shows the estimated profits of the year's operations, taking assets into consideration:—

	Rs.
Cash surplus	2,56,429
Value of timber at commencement of year	4,86,794
Ditto at close of year	4,95,449
Difference in the year	+ 8,645
Value of live and dead stock at commencement of the year	1,93,528
Ditto ditto close of the year	1,97,762
Difference in the year	+-4,234
Total ...	+-12,879
Balance in favour of the year ...	2,69,308
Deduct—Outstandings at commencement of the year	11,534
Balance ...	2,57,774
Add—Outstandings at close of the year	18,476
Total profits of the year with assets ...	2,76,250

This hardly shows the real benefits of the year's transactions: a large quantity of *old* stock, which had been kept on stock for years, was cleared off at Bahramghát (as also many cubic feet of slabs that ought never to have been brought on to stock), whereas much of the *new* stock is *bespoke*, and the revenue for it will all come in the present financial year 1890-91.

64. *Value of free produce.*—The value of free produce given away has been shown in para. 49 to be Rs. 89,671; but as these are priced much below market rates, the financial results should be increased by fully 1,00,000 of rupees or more.

65. *Outstandings.*—The outstandings due to the circle are Rs. 18,476, most of which are recoverable. About Rs. 2,602, outstandings for a long time in Kheri, money for grazing dues, are irrecoverable, and for which a separate application will be made to write the amount off to profit and loss.

66. *Accounts of contractors.*—The outstandings from contractors and disbursers are Rs. 48,588 against Rs. 47,157 of last year, all of which is, I think, recoverable. The financial year ends whilst the Forest Department is at its busiest, the working season being practically over at the setting in of the rains, or some three months after the end of the financial year.

CHAPTER VI.

GENERAL.

67. *Tramways.*—In last year's report Mr. Ponsonby alluded to a tramway from Mailáni to Dudwa. This has been a line long thought of, and the Rohilkhand and Kumaun railway company itself now proposes making a line from Mailáni as far as the Sárda: it is probable that in time the Railway Company will extend the branch, or "fair weather siding," to Dudwa. It is, I believe, probable that the line Mr. Ponsonby mentioned from Nishángára to the Kauriála, also another long thought of line, will not be necessary, as the Bengal and North-Western Railway Company has an idea of making a branch from the main line, about Nánpára to Motipur and Sajauli.

68 *Control ; Services of Officers* —Mr. Ponsonby's administration of the Bhīra Subdivision and Pilibhít Division has not been so good as it should have been, he held charge of my office when I had leave and cleared off a large amount of business, but he himself fell ill in November and had to go on sick leave Mr Allan did good work, and has been superannuated on a pension Mr. A. Campbell has done excellent service as usual, his heart being in his work Mr Rebsch has exerted himself very successfully in creating revenue by the extraction of dead and dying sál trees, which he has marked himself Mr Hill is doing capital work and is a first rate officer Babu Karuna Nidhán Mukarji has done good work in Gonda, as has Babu Raghunáth Páthak in Gorakhpur Babu Kanhaya Lal, after a long service, for the past twelve years at Bahramghát, has retired on a pension and Pandit Raghubar Dyal Bájpái has succeeded him, working well and vigorously

69. *Executive Staff.*—Ranger Amánatulla Khan has been retired on a superannuation pension, and I am glad to say has been provided for by a situation in the Balrámpur Estate. Ranger Debi Prasad's papers have not been finally settled as yet, but he has retired on medical certificate. Ranger Sital Prasad has been dismissed. Thus three old rangers have gone These, in addition to the two who retired last year, make five out of a strength of only 7 rangers, now reduced to 6 rangers The new rangers are much younger men, and three out of six are new men who have passed through Dehra.

70. *Subordinate Staff*—Have worked fairly on the whole, but some men have had to be dismissed

71. *Office Establishment* —This is far too weak for the present system of accounts, and the revision of the establishment is necessary, but I believe the best thing would be to remodel the system of accounts, the present arrangement being as faulty as it well can be. The Department of Public Works has had a committee and revised its system of accounts, it is believed, and the sooner something of the same sort is done for the accounts of the Forest Department the better, for at present the effects are not commensurate with the labour and money expended; and the present Assistant Comptroller-General seems to throw as much work as he can on Conservators and Divisional Officers instead of lightening the work, as it is the intent of Government that he should do.

72. *Health* —The year has been an unhealthy one on the whole The influenza prostrated some of the establishment and in the Kheri Division cholera was very bad in and about the village of Palia, through which all our carters from the forests to Mailáni and Gola had to go, so that carts were not obtained in such numbers as was desirable Fortunately it hardly got into the forests, where we had large numbers of sawyers and carters.

NAINI TAL
The 4th August 1890

E. S. WOOD, CAPTAIN,
Contr. of Forests, N.-W P & Oudh, Oudh Circle.

ANNUAL STATEMENTS

AND

APPENDICES.

FOREST DEPARTMENT, N.-W. P. AND OUDH, OUDH CIRCLE. [Form No. 49.

AREA OF RESERVED PROTECTED, AND UNCLASSED STATE, FORESTS AND WASTE LANDS, 1889-90.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 1st March 1890.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Pilibhít Division ...	Pilibhít District ...	Pilibhít Division	97,045	152	...	...	97,045	152		
Bhira Sub-division ...	Kheri do. ...	Bhira Sub-division ...	96,651	151	...	...	96,651	151	...	—131 acres in Bhira Sub-division of Kheri Khamaria forest, formerly known as grant No. 3 of Bhur.
Kheri Division ...	Ditto do.	Newalkhar do. ... / Khairigarh do. ...	168,296	263	...	...	168,296	263		
Bahraich do. ...	Bahraich do.	Motipur do. ... / Bhinga do. ...	208,021	325	...	...	208,021	325		
Gonda do. ...	Gonda do. ...	Gonda Division	99,137	155	...	...	99,137	155		
Gorakhpur do. ...	Gorakhpur do. ...	Gorakhpur do.	100,556	157	...	...	100,556	157		
		Total of Reserved Forests ...	769,706	1,203	...	...	769,706	1,203		
			(b). Area of protected forests. *Nil.* (c). Area of unclassed state forests and waste land. *Nil.*							
		GRAND TOTAL ...	769,706	1,203	...	...	769,706	1,203		

NAINI TAL:
The 31st July 1890.

E. WOOD, CAPTAIN,
Conservator of Forests, N.-W. P. and Oudh, Oudh Circle.

[Form No. 50.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

REGISTER OF BREACHES OF FOREST RULES DURING 1889-90.

Forest Division and Civil District.	Cases pending from 1888-89.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission, or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons	
Pilibhit ... A	...	3	1	...	...	4	4	1	1	3	9	4	10	...
B	1	...	...	...	...	...	1	...	...	1	1	1	1	...
C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	1	3	1	...	...	4	5	1	1	4	10	5	11	...
Bhira ... A	...	...	7	...	...	7	7	6	7	1	2	7	9	...
B	...	...	1	4	...	5	5	4	18	1	2	5	20	...
C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	...	...	8	4	...	12	12	10	25	2	4	12	29	...
Kheri ... A	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B	...	...	...	1	...	1	1	1	3	...	...	1	3	...
C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	...	...	...	1	...	1	1	1	3	...	...	1	3	...
Bahraich ... A	...	2	11	17	1	31	31	29	63	2	4	31	67	...
B	...	...	...	1	1	2	2	1	2	1	1	2	3	...
C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	...	2	11	18	2	33	33	30	65	3	5	33	70	...
Gonda ... A	...	...	2	20	...	22	22	22	35	...	1	22	36	...
B	...	1	...	4	...	5	5	5	30	...	...	5	30	...
C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	...	1	2	24	...	27	27	27	65	...	1	27	66	...

Gorakhpur ...	A ...	...	1	4	...	...	5	5	5	9	...	...	5	9	...
	B ...	...	1	44	10	15	70	70	69	206	1	1	70	207	...
	C ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...		...	2	48	10	15	75	75	74	215	1	1	75	216	...
Total ...	1889-90 A ...	...	6	25	37	1	69	69	63	115	6	16	69	131	...
	1888-89 A ...	...	6	36	23	9	74	74	70	142	4	14	74	156	...
Difference ...		...	...	−11	+14	−8	−5	−5	−7	−27	+2	+2	−5	−25	...
Total ...	1889-90 B ...	1	2	45	20	16	83	84	80	259	4	5	84	264	...
	1888-89 B ...	...	1	64	41	7	113	113	109	241	3	12	112	253	1
Difference ...		+1	+1	−19	−21	+9	−30	−29	−29	+18	+1	−7	−28	+11	−1
Total ...	1889-90 C ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1888-89 C ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Difference ...		...	...	...	...	...	...	...	...	...	...	...	...	...	...
GRAND TOTAL ...	A ...	...	6	25	37	1	69	69	63	115	6	16	69	131	...
	B ...	1	2	45	20	16	83	84	80	259	4	5	84	264	...
	C ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
GRAND TOTAL ...	1889-90 ...	1	8	70	57	17	152	153	143	374	10	21	153	395	...
	1888-89 ...	...	7	100	64	16	187	187	179	383	7	26	186	409	1
Difference ...		+1	+1	−30	−7	+1	−35	−34	−36	−9	+3	−5	−33	−14	−1

A Means cases taken into Court.
B Means cases disposed of under section 67 of Indian Forest Act, 1878.
C Means undetected cases.

Amount of compensation realized from cases compounded under section 67 of the Indian Forest Act.

		Rs.	a.	p.
Bhira ...	...	81	6	0
Kheri ...	...	1	0	0
Bahraich ...	...	17	0	0
Gonda ...	...	74	6	0
Gorakhpur ...	...	897	10	0
Total	...	1,071	6	0

NAINI TAL:
Dated the 31st July 1890.

E. WOOD, CAPTAIN,
Conservator of Forests, N.-W. P. & Oudh, Oudh Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE. [Form No. 51.

AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON 1890—TO ACCOMPANY REPORT FOR 1889-90.

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1889.	During dry season of 1890.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
			Acres.	Acres.	Acres.	Acres.	Rs.	
Pilibhít Division ...	North Pilibhít							
	East "							
	South-east "	1880	15,337	20,588	...	20,588		
	Maina Kot "						1,705	
	Dhanara "	1881	3,876	16,830	14,657	2,173		
		1886	4,193	6,360	1,718	4,642		
	Total ...	...	23,406	43,778	16,375	27,403	1,705	
Bhira Sub-Division,	Marha	1887	15,725	15,930	6	15,924		
	Menniesganj	1885	6,414	7,114	42	7,072		
	Khareta	1885	3,833	11,256	4	11,252		
	Kaptanra Menniesganj	1886	7,414	7,414	...	7,414	1,193	
	Barauncha	1888	4,285	4,302	527	3,775		
	Total ...	...	37,671	46,016	579	45,437	1,193	
Kheri Division ...	Dudwa home block							
	Newalkhar Sub-Division	1872	32,207	32,240	869	31,371	2,188	
	Kusumbha home block							
	Khairigarh Sub-Division	1881	39,640	39,640	480	39,160	1,669	
	Total ...	...	71,847	71,880	1,349	70,531	3,857	
Bahraich Division...	Motipur	1878	45,669	64,960	...	64,960	1,214	
	Chakia Charda	1875 to 85	22,821	23,040	288	22,752	733	
	Bhinga	1875 to 76	69,760	69,760	...	69,760	1,479	
	Total ...	...	138,250	157,760	288	157,472	3,426	

Gonda Division ...	Sections I to IV	1880	90,289	99,137	10,237	88,900	739
	Nawabganj	1880-87					
	Total ...	...	90,289	99,137	10,237	88,900	739
Gorkahpur Division,	Ramgarh and Tilkonia	1875	6,754	6,754	...	6,754	403
	Nagwa		6,900	6,900	...	6,900	120
	Sonari and Jagpur		21,802	22,282	...	22,282	656
	Dudhai		8,600	8,600	...	8,600	274
	Bhillampur and Bankf		4,154	4,154	...	4,154	208
	East Lehra		7,600	7,600	...	7,600	141
	West Lehra		11,760	12,300	...	12,300	189
	Bhari Baisi		6,000	6,000	...	6,000	148
	Bhari Baban						
	Sakhwi Sissu Plantation	1886	2,180	2,180	...	2,180	23
	Total ...	...	75,750	76,770	...	76,770	2,162
	Grand Total 1889-90 ...	...	437,213	495,341	28,828	466,513	13,082
	1888-89 ...	...	451,577	487,919	50,706	437,213	11,525
	Difference	...	−14,364	+7,422	−21,878	+29,300	+1,557

NOTE.—This form is for the dry season, and not for the financial year, and therefore the date up to which expenditure is included must be filled in to suit the circumstances of each circle.

NAINI TAL:
The 31st July 1890.

E. WOOD, CAPTAIN,
Conservator of Forests, N.-W. P. and Oudh, Oudh Circle.

[Form No. 52.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

AREA OF PLANTATIONS, 1889-90.

Division.	Name of plantation.	Area in acres. On 1st April 1889.	Added during the year.	Excluded during the year	Area on 31st March 1890.	Receipts Of the year.	Charges Of the year.	Remarks.
Bahraich	Nishangara	11	...	...	11	...	...	
	Kain	5	...	...	5	...	...	
	Doondra	2	...	...	2	...	...	
	Ponsonbyganj	1	...	...	1	...	...	
	Total ...	19	...	...	19	...	...	
Gorakhpur	Ramgarh	303	...	..	303	...	124	
	Sonari	200	...	100	100	...	*166	* Swamped in 1889 or killed by the bark insects. The expenditure includes preservation of thatching grass.
	Sukhwi	2,180	...	...	2,180	...	*2,021	* About 300 acres have been swamped by the rains of 1889. These will be filled up in cold weather planting.
	East Lehra	40	...	...	40	...	223	
	Total ...	2,723	...	100	2,623	...	2 534	
	GRAND TOTAL ...	2,742	...	100	2,642	...	2,534	
Pilibhft	Cultural Operations	...	...	...	...	...	...	Extending nursery and filling blanks (in the area of past year.)
Bhira	Ditto	17	15	...	32	...	72	
Kheri	Ditto	33	...	...	33	...	217	
Bahraich	Ditto	5	...	...	5	...	...	With bamboos.
Gonda	Ditto	...	3	...	3	...	90	Nurseries of bamboos.
Gorakhpur	Ditto	...	...	...	...	...	833	Bamboo and Khair plantations in different forests.
	Total ...	55	18	...	73	...	1,212	
	GRAND TOTAL ...	2,797	18	100	2,715	...	3,746	

NAINI TAL:
The 31st July 1890.

E. WOOD, CAPTAIN,
Conservator of Forests, N.-W. P. & Oudh, Oudh Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

OUTTURN (IN CUBIC FEET, SOLID) OF TIMBER AND FUEL DURING THE YEAR 1889-90 AND AGENCY OF EXPLOITATION.

Divisions.	Timber in the rough; logs.					Timber in the rough: poles.					Sawn or squared timber.					Miscellaneous.					Fuel.					Total.
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holder.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free-holders.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Outturn.
	I.—Reserved Forests.																								
	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft	C.ft.	C ft	C.ft.	C.ft.	C.ft.	C ft	C.ft.	C.ft.	C.ft	C.ft.	C ft.	C ft.	C.ft	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.
Pilibhít Division.	...	253	...	...	253	1,280	2,524	...	141,310	145,114	375	1,262	...	4	1,641	..	5,740	...	5,820	11,560	170,545	36,39[illegible]	...	61,540	268,475	427,043
Bhira Subdivision.	518	...	...	...	518	774	5,471	4,265	...	10,510	477	...	...	...	477	595	5,066	43,913	...	49,574	201,036	52,76[illegible]	50,014	...	303,810	364,889
Kheri Division.	190 480	58,590	...	...	249,070	9,087	9,921	155,825	...	174,833	227,203	1,633	16,348	...	245,184	1,220	120	55,558	...	56,898	...	27,326	203,101	...	230,421	956,406
Bahramghát Division.	15,154	...	...	...	15,154	4,747	...	...	...	4,747	2,209	...	...	...	2,209	1,561	..	...	...	1,561	...	...	...	...	...	28,671
Bahraich Division.	189	159,110	...	...	159,299	229	289,648	774,379	...	1,064,256	...	...	...	...	...	...	4,238	...	...	4,238	...	118,507	12,945	...	131,452	1,359,245
Gonda Division.	148	10,476	13	...	10,637	1,617	22,141	72,470	...	96,228	1,946	733	...	...	2,079	12,086	43,072	44,593	...	99,751	290,400	150,359	54,808	...	495.627	704,322
Gorakhpur Division.	14,347	580	...	...	14,927	32,155	7,552	...	...	39,707	1,681	6	...	...	1,637	8,395	2,486	...	...	10,881	390,596	74,792	...	...	465,388	532,540
Total ...	220,836	229,009	13	...	449,858	49,889	337,257	1,006,939	141,310	1,535,395	233,241	3,634	16,348	4	253,227	23,857	60,722	144,064	5,820	234,463	1,052,577	460,12[illegible]	320,92[illegible]	61,540	1,895,173	4,368,116

II.—Protected Forests.

Nil.

III.—Unclassed Forests.

Nil.

Charcoal should be shown by its equivalent in fuel, the quantity wood consumed in producing it being entered in cubic feet, solid.

NAINI TAL:
The 31st July 1890.

E. WOOD, CAPTAIN,
Conservator of Forests, N.-W. P. & Oudh, Oudh Circle.

FOREST DEPARTMENT, N.-W PROVINCES AND OUDH, OUDH CIRCLE.

OUTTURN OF MINOR FOREST PRODUCE DURING THE YEAR 1889-90.

Division.	Description of produce.	Produce removed or utilized.										Remarks.
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.		
		Quantity.	Value.	Quantity	Value.	Quantity.	Value.	Quantity.	Value.	Quantity	Value.	
						I.—Reserved Forests.						
Pilibhit Division.	Grazing dues	...	Rs. ...	...	Rs 1,192	...	Rs. ...	...	Rs. 965	...	Rs. 2.157	
	Minor produce grasses ...	...	...	1,125	1,003	...	...	...	1,609	...	3,736	
	Ditto Wild drugs ...	...	...	135	39	...	...	...	...	...	174	
	Ditto Hides and horns ..	...	...	...	30	...	...	...	...	...	30	
	Ditto Miscellaneous ...	...	...	10	207	...	...	...	35	...	252	
	Total { Grazing ...	...	...	...	1,192	...	...	...	965	...	2,157	
	Total { Minor produce	...	...	1,270	1,278	...	...	...	1,644	...	4,192	
	GRAND TOTAL	...	...	1,270	...	2,470	...	...	2,609	...	6,349	
Bhira Sub-division.	Grazing dues	...	...	...	4,861	561*	...	...	...	...	4,861	561
	Minor produce Baib ...	...	9,853	10,469	..	...	...	...	...	...	9,853	10,469
	Ditto Thatching of grass ..	...	...	...	2,294	479	2,725	586	...	...	5,009	1,065
	Ditto Withies ...	...	...	...	76	2	685	21	...	...	761	23
	Ditto Thorns ...	...	...	...	3	1	38	5	...	...	41	6
	Ditto Kush grass ...	...	...	...	45	1	108	3	...	...	153	4
	Ditto Panga ...	...	4	1	792	53	...	...	...	...	796	54
	Ditto Manure ..	...	...	...	87	11	1	...	...	...	88	11
	Ditto Reeds and grass ..	...	...	...	19	43	94	12	...	...	113	55
	Ditto Sal barks ...	...	673	97	...	...	...	...	...	...	673	97
	Ditto Catechu barks ...	...	20	21	...	...	...	...	...	...	20	21
	Ditto Asaina seeds ...	.	1	1	...	...	...	...	...	...	1	1
	Ditto Catechu ...	...	...	...	...	100	...	...	...	...	...	100
	Ditto Lime ...	...	...	...	20,682	39	...	...	...	...	20,682	39
	Ditto Honey and wax .		4	47	...	...	...	...	...	...	4	47
	Ditto Hides No.		118	45	...	...	...	...	...	...	118	45

* 13 on account of last year's revenue realized.

Kheri Division.	Ditto	Bhingy	...	35	110	...	...	...	...	...	...	35	110
	Ditto	Har and Babera	...	212	303	...	...	...	...	...	...	212	303
	Ditto	Aonla ...	...	16	6	...	...	...	...	...	...	16	6
	Ditto	Bhilawan ...	...	17	21	...	...	...	...	...	...	17	21
	Ditto	Kachoor ...	...	27	69	...	...	...	...	...	...	27	69
	Ditto	Chaibara ...	...	2	8	...	..	...	...	...	...	2	8
	Ditto	Mahua ...	...	54	100	...	...	...	...	...	...	54	100
	Ditto	Pipal ...	...	3	138	...	...	...	...	...	...	3	138
	Ditto	Kaua ...	...	681	511	...	...	...	...	..	...	681	511
	Total	Grazing ...	...	...	...	4 861	561	...	...	...	...	4,861	561
		Minor produce	...	11,720	11,947	23,988	729	3,651	627	...	...	39,359	13,303
		GRAND TOTAL	...	11,720	11,947	28,849	1,290	3,651	627	...	...	44,220	13,864
	Grazing dues		...	...	...	...	10,968	...	755	...	...	...	11,723
	Minor produce thatching grass		...	...	...	693	98	65,828	1,267	...	...	66,521	1,365
	Ditto	Baib ditto	...	...	...	72	6	72	6	...	...	144	12
	Ditto	Reed ditto	...	...	...	...	...	40,233	1,676	...	...	40,233	1,676
	Ditto	Khagar ditto	...	...	...	...	...	67,334	1,531	...	...	67,334	1,531
	Ditto	Narkul ditto	...	...	...	...	...	5,076	106	...	...	5,076	106
	Ditto	Munj ditto	...	...	...	...	...	5,348	668	...	...	5,348	668
	Ditto	Ratwa ...	...	...	...	...	...	3,807	233	...	...	3,807	238
	Ditto	Kuss ...	...	...	...	...	...	35	4	...	...	35	4
	Ditto	Sirk ...	...	...	...	...	...	825	31	...	...	825	31
	Ditto	Thorns ...	...	...	..	104	3	...	...	...	...	104	3
	Ditto	Agai and Morine leaves	...	...	...	26	1	...	...	...	...	26	1
	Ditto	Pendar fruits ...	...	...	...	31	2	...	...	...	...	31	2
	Ditto	Shell ...	...	...	...	1	2	...	...	...	...	1	2
	Ditto	Assaina bark ..	...	..	...	3	2	...	...	...	...	3	2
	Ditto	Khair ...	...	...	...	16,544	12,408	...	...	...	...	16,544	12,408
	Ditto	Hides ...	..	...	...	...	1,090	...	...	...	...	...	1,090
	Ditto	Pipal fruits ...	...	...	...	...	375	...	...	...	...	...	375
	Ditto	Honey and wax	...	...	...	...	340	...	...	...	...	...	340
	Total	Grazing ...	...	...	...	...	10,968	...	755	...	...	.	11,723
		Minor produce	...	...	...	16,709	*14,327	1,88,558	5,522			2,06,032	19,991
						M 765	142						
		GRAND TOTAL	...	...	...	17,474	25,137	1,88,558	6,277	...	...	2,06,032	31,714

* Rs. 142 realized on account of last year's revenue.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

OUTTURN OF MINOR FOREST PRODUCE DURING THE YEAR 1889-90.

Division.	Description of produce.	Produce removed or utilized.								Remarks.
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
					I.—Reserved Forests.							
			Rs.		Rs		Rs.		Rs.		Rs	
Bahraich Division.	Bamboos No.	...	...	3,023	192	...	...	...	...	No. 3,023	192	
	Grazing dues	...	...	85,322	9,180	...	...	...	...	85,322	9,180	
	Minor produce honey and wax	...	...	...	431	...	...	...	...	...	431	
	Ditto Hides	...	...	...	1,524	...	...	...	...	...	1,524	
	Ditto Horns	...	...	...	15	...	...	...	...	...	15	
	Ditto Catechu	...	...	...	1,159	...	...	...	...	...	1,159	
	Ditto Canes	...	...	175	27	...	...	...	...	175	27	
	Ditto Cowdung	...	...	...	13	...	...	...	...	...	13	
	Ditto Mahua flowers	M. 24	13	...	1,025	...	...	...	...	M 24	1,038	
	Ditto Fruits	...	...	...	212	...	...	...	...	...	212	
	Ditto Baib grass	M. 17,613	16,564	...	60	...	...	...	...	M 17,613	16,624	
	Ditto Long grass	M. 865	55	...	2,071	...	2,311	...	...	M 865	4,437	
	Ditto Khas grass	...	...	...	65	...	...	...	...	...	65	
	Ditto Nal ditto	...	...	...	50	...	...	...	...	...	50	
	Ditto Jhaú ditto	...	...	...	20	...	...	...	...	...	20	
	Ditto Sirk ditto	...	...	...	31	...	...	...	...	...	31	
	Ditto Thorns ditto	...	...	...	...	...	511	...	...	...	511	
	Total Bamboos	...	...	3,023	192	...	...	...	...	3,023	192	
	Total Grazing	...	...	85,322	9,180	...	...	...	...	85,322	9,180	
	Total Minor produce	...	18,502	16,632	175	6,709	...	2,822	...	...	18,677	26,157
	GRAND TOTAL	...	18,502	16,632	88,520	16,075	...	2,822	...	...	1,07,022	35,529

Gonda Division.	Grazing dues				2,075		12,978					12,978
	Minor produce	grasses					4,076		231			5,382
	Ditto	Elephant fodder							1,750			1,750
	Ditto	Confiscated produce			9							9
	Ditto	Catechu					3,455					3,455
	Ditto	Bark					37					37
	Ditto	Fruits and flowers					464					464
	Ditto	Honey					18					18
	Ditto	Hide					19					19
	Ditto	Lime			3,000		159					3,159
	Total	Grazing					12,978					12,978
		Minor produce			5,084		8,238		1,981			15,293
		GRAND TOTAL			5,084		21,206		1,981			28,271
Gorakhpur Division.	Grazing dues					61,518	10,493				61,518	10,493
	Bamboos						25					25
	Minor produce	grasses					15,535					15,535
	Ditto	Baib			11		122					133
	Ditto	Narkul					170					170
	Ditto	Leaves					20					20
	Ditto	Mahua flowers					28					28
	Ditto	Wild fruit					36					36
	Ditto	Kamraj					4					4
	Ditto	Kusrot					30					30
	Ditto	Canes					12					12
	Ditto	Hides					340					340
	Ditto	Honey					6					6
	Ditto	Pattore					240					240
	Total	Bamboos					25					25
		Grazing				61,518	10,493				61,518	10,493
		Minor produce			11		16,543					16,554
		GRAND TOTAL			11	61,518	27,061				61,518	27,072
GRAND TOTAL,	Bamboos						217					217
	Grazing						45,372		755		965	47,092
	Minor produce				34,944		47,950		10,952		1,644	95,490

II.—Protected Forests.

Nil.

III.—Unclassed State Forests and Waste Lands.

Nil.

GRAND TOTAL	1889-90			34,944		98,539		11,707		2,609		1,42,799
	1888-89			11,274		85,855		10,820		4,372		1,12,321
	Difference			+ 23,670		+ 7,684		+ 887		− 1,763		+ 30,478

NAINI TAL:
The 31st July 1890.

E. WOOD, CAPTAIN,
Conservator of Forests, N.-W. P. and Oudh, Oudh Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1889-90.

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
BALANCE AT COMMENCEMENT OF THE YEAR.				
Sale Depôt.				
BAHRAMGHAT DIVISION.				
Bahrámghát Depôt.				
Sál logs	334	18,344		
Asna ,, ...	80	5,785		
Sissu ,, ...	4	76		
Haldu ,, ...	10	650		
Sál sleepers	17,333	26,000		
,, scantlings	8,393	9,736		
Asna ,, ...	180	51		
Sissu ,, ...	317	161		
Haldu ,, ...	12	13		
Miscellaneous poles	10	29		
Large boats	8	...		
Sál pieces	161	1,413		
Asna ,, ...	20	139		
Sissu ,, ...	18	166		
Haldu ,, ...	1	7		
	6,890	...		
Sál offcuts ... ... mds. ...	11,182	...		
	46	...		
Asna ,, ... mds. ...	83	...		
	144	...		
Sissu ,, ... mds. ...	54	...		
Haldu ,, ...	4	17		
			33,975	
Firewood ... ... mds. ..	33,448	...	mds. 4,4767	62,560
Lucknow Depôt.				
Sál scantlings	1,034	107		
Sissu ,, ...	16	9		
Haldu ,, ...	38	3		
Thin sál planks... ... mds. ...	278	} ...		
	830			
Sál offcuts ... ... mds. ...	1,528	...		
Miscellaneous poles	77	...		
			1,995	
Firewood ... ... mds. ...	1,200	...	mds. 3,006	119
Bahrámghát drift timber ...	488	3,710	488	3,710

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
DISPOSALS.				
To purchasers from Sale Depôts.				
Sál logs	342	13,082		
Asna ,, ...	804	45,908		
Haldu ,, ...	16	1,120		
	28			
Sálhalf logs ... ... mds. ...	80	185		
,, sleepers	28,259	42,389		
Asna ,, ...	16	24		
	418			
Sál pieces ... ... mds. ...	645	408		
	133	...		
Thin sál planks ... .. mds. ...	1,555	...		
	15	...		
Boat planks ... ... mds. ...	278	...		
Sissu scantlings	494	55		
Haldu ,, ...	61	9		
Sál botas	774	5,300		
Asna ,, ...	13	128		
Sissu ,, ...	14	74		
	16,806	...		
Sál offcuts ... ... mds. ...	26,887	...		
	20	...		
Asna ,, ... mds. ...	38	...		
Sál ballis	339	...		
Miscellaneous ballis	265	...		
Large boats	6	...		
Truss	11	77		
	16	...		
Sissu butt ends ... ... mds. ...	50	...		
	129	...		
Miscellaneous timbers ... ... mds. ...	12	...		
Sál scantlings	81,070	76,086		
Asna ,, ...	3,117	1,228		
	2	...		
Sál gutka ... ... mds. ...	713	...		
Fuel (Bahraich) ... ... mds. ...	21,542	...		
			133,487	
Sál poles (Bahraich)	319	3,471	mds. 51,800	289,544

	Locally.						
Pilibhit Division.	Poles and saplings		623	666			
	Firewood		mds. 5,575	...	mds. 5,575	623	666
Kheri Division.	Sál sleepers		35,932	57,136			
	Asna „		49,248	74,123			
	Sál logs		6,850	293,676			
	Asna logs		1,020	36,785			
	Haldu „		156	12,140			
	Sál signal post		2	36			
	„ slabs		256,737	383,128			
	Asna „		70,559	231,558			
	Sál scantlings		26,183	22,515			
	Asna „		3,069	2,036			
	Large boats		60	...			
	Dug out (canoes)		538	...	449,354	1,113,133	
Bhira Sub-Division.	Poles and saplings		892	3,175			
	Firewood	mds.	23,896				
	Charcoal	„	131				
					892		
	Minor produce	„	94		24,121	3,175	
Baheaich Division.	Sál sleepers		2,187	3,181			
	„ offcuts		6,165	12,107			
	„ log		44	1,795			
	„ poles		6,240	72,876			
	„ planks		1	...			
	Miscellaneous poles		9	150			
	Mongries		2	...	14,648	90,109	
Gonda Division.	Sál pieces		363	1,000			
	Asna „		19	95			
	Sál offcuts		509	254			
	Jamun logs		27	108			
	„ offcuts		450	225			
	Dhao logs		15	60			
	Sál poles		634	687			
	Mahua logs		132	1,446			
	Dhao axles		184	92			
	Sál beams		4	28			
	Firewood		mds. 1,484	...			
					2,337		
	Minor produce		„ 2,124	...	3,608	3,995	
Gonarhupur Division.	Sál ballas (poles)		1,235	2,470			
	Asna „		52	104			
	Sál koros		3,988	3,988			
	Asna „		58	58			
	Sál pieces and agailas		1,556	6,224			
	„ „ golas		473	473			
	„ „ dharaus		42	84			

	To purchasers from Forest Depôts.						
Sál offcuts					606	1,253	
„ logs					64	1,961	
„ sleepers					20,606	30,909	
„ scantlings					22,618	20,683	
„ slabs					3,695	3,695	
„ poles					11,539	28,700	
„ hollow logs					2	49	
„ botas (pieces)					1,292	5,168	
					25		
„ planks				mds.	518	483	
Asna sleepers					133	199	
„ scantlings					1,725	1,899	
„ timber					22	112	
„ planks					27	137	
Sissu piece					1	8	
Poles and saplings					2,532	2,212	
Miscellaneous timber					74	315	
Dhau dharaus					4	4	
Miscellaneous articles					205	726	
Firewood				mds.	2,50,945		
Charcoal				„	759	...	
Baib grass				„	23,003		
Hides					119	...	
Minor produce				mds.	1,118	...	
Drift fuel				„	24,349	...	
Lime				„	6,567	...	
Asna poles					2,240	4,840	
							72,588
Drift timber					5,059	33,877	mds. 3,07,359
							137,430
	To purchasers, Locally.						
Sál pieces					205	205	
„ sleepers					3	5	
„ poles					6,213	6,486	
„ lark				mds.	50	...	
„ planks					7	3	
Asna slabs					28	77	
„ poles					50	180	
Sisu timber					3	18	
Miscellaneous timber					483	1,605	
Drift „					4,081	14,792	
Firewood				mds.	29,895	...	
Miscellaneous articles					123	1,083	
Asna piece					3	3	
Confiscated poles					1,637	566	
							12,725
„ firewood					10	20	mds. 29,945
							23,960

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1889-90—(*continued*).

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
LOCALLY—(*continued*).				
GORAKHPUR DIVISION—(*contd.*) Sál offcuts	38	38		
„ chaukhats	2	2		
„ battens	32	24		
Cart manufacture	1	17		
Miscellaneous pieces	1	4		
Sissu pieces (agailas)	4	16		
Firewood ... ... mds. ...	38	...		
Drift timber of Gandak river ...	394	2,861	8,802	
„ „ of Rapti	926	3,212	mds. 38	19,557
Total Balance { No. ... Mds. ...	...	...	513,433 / 81,115	1,300,498
RECEIPTS.				
From the Forests in Sale Depôts.				
Sál logs	4,577	177,031		
Asna „	915	50,557		
Haldu „	8	603		
Sál sleepers	15,286	22,929		
Asna „	16	24		
Sál ballas	339	...	21,141	251,144
Received from the Forests in Depôts other than Sale Depôts.				
Sál logs	3,053	124,138		
„ pieces	3,824	13,756		
„ crooked trees	12,131	134,719		
„ sleepers	23,771	35,656		
„ poles	8,632	13,711		
„ offcuts	4,360	4,150		
„ scantlings	733	465		
„ hollow logs	2	40		

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
To conversion in Depôts.				
Sál poles	42	147		
„ logs	3,843	157,871		
Asna „	55	2,874		
Sissu „	3	60		
Sál poles and saplings	92	755		
„ crooked trees	12,131	134,719		
Asna „	6,040	92,484		
Sál scantlings	6,254	10,967		
Asna „	96	84		
Sál botas	407	5,065		
Asna „	5	87		
Sissu „	9	76		
Haldu „	1	7		
	7,508			
Sál offcuts ... ... mds. ...	1,191	32,669		
Asna „	243	885		
Sissu „	3	3		
Sál sleepers	6	9		
			36,738	
Fuel ... ... mds. ...	495	...	mds. 1,686	438,762
To lost or written off.				
Sál poles	663	1,216		
Fuel ... ... mds. ...	326	...		
Charcoal ... ... „ ...	112	...		
Minor produce ... ... „ ...	24	...		
Sál offcuts	10	10		
„ logs	264	11,088		
„ pieces	330	1,320		
„ scantlings	25	21		
„ slabs	253,464	277,698		
Asna logs	195	7,020		
Haldu „	8	618		
Asna slabs	70,559	2,31,558		
Dug out	69	...		
Large boat	1	...		

Poles	42	75		
Asna logs	1,263	61,887		
„ wood	23	119		
„ trees	6,040	92,484		
„ planks	27	137		
„ scantlings	768	965		
„ poles	8,682	14,998		
Sissu logs	33	581		
Tun logs	17	314		
Miscellaneous logs	3	14		
Unreserved wood	45	201		
Miscellaneous poles	13,716	11,406		
Baib grass ... ... mds. ...	32,625	...		
	118	...		
Minor produce ... ... mds. ...	3,014	...		
Miscellaneous articles	990	2,353		
	25	...		
Planks ... ... mds. ...	518	483		
Catechu ... ... „ ...	18	...		
Drift timber ... Gandak ... No. ...	3,789	57,912		
Drift timber ... Gandak ... mds. ...	19,423			
Drift timber ... Rápti ... No. ...	1,416	18,618		
Drift timber ... Rápti ... mds. ...	5,002			
Drift timber ... Bahrámghát	3,142	23,671		
Sissu pieces	1	8		
Firewood ... ... mds. ...	4,08,659	...		
Charcoal ... ... „ ...	2,172	...		
Canoes	61	...		
Lime ... ... mds. ...	6,667	...	96,717 mds. 4,78,080	6,12,870
Received from Forests and sold Locally.				
Sál pieces	205	205		
„ sleepers	3	5		
„ poles	6,213	6,486		
„ bark ... ... mds. ...	50	...		
„ planks	7	3		
Asna slabs	28	27		
„ poles	52	180		
Sissu timber	3	18		
Miscellaneous timber	483	1,605		
Drift „	4,081	14,792		
Firewood ... ... mds. ...	29,895	...		
Miscellaneous articles	123	1,083		
Asna pieces	3	3		
Confiscated poles	1,637	566		
„ firewood	10	20	12,725 mds. 29,945	23,960
Received by conversion in Depôts.				
Sál scantlings... ... ... mds. ...	90,800	87,919		
	200			
	135			
Thin sál planks ... ... mds. ...	2,070	...		

Tun timber	1	6		
Baib grass	321	...		
Miscellaneous articles	1	17	3,25,590 mds. 782	530,570
Used Departmentally.				
Sál slabs	1,287	1,930		
Sissu wood	7	14		
Sál logs	3	99		
„ offcuts ... ... St. ...	4,791			
„ offcuts ... ... St. ...	16	103		
„ offcuts ... ... mds. ...	26,279			
„ poles	611	697		
Miscellaneous timber	45	476		
Dhau axles	13	6		
Sissu logs	13	80		
Sál beams	4	28		
Asna poles	1	3		
Sál scantlings ... ... mds. ...	1,349			
	514	2,798		
Sál pieces ... ... mds. ...	40			
Sál pieces ... ... mds. ...	272			
Sál pieces ... ... st. ...	257	10,426		
Sissu scantlings	24	35		
Asna piece	6	40		
	76	...		
„ offcuts	107	...		
Haldu „	2	8		
Boat (broken)	1	...	8,263 St. 273 mds. 27,172	16,743
To transfer.				
Sál sleepers	22,606	33,909		
Asna „	16	24		
Sál scantlings ... ... mds. ...	24,998	16,407		
Asna „	1,512			
Sál slabs	705	285		
„ pieces ... ... st. ...	1,407	2,110		
„ pieces ... ... mds. ...	2			
Fuel ... ... mds. ...	713	...		
	15,320	...		
Sal offcuts ... ... mds. ...	9,806	13,264		
„ logs	2,936			
Asna logs	4,579	177,113		
Haldu „	925	51,009		
	8	603		
Sál scantlings (transferred to Kheri Division) ...	312	653	65,362 mds. 20,481	2,95,377
Made over to claimants.				
Drift timber	502	2,279	502	2,279
Total disposal ... No. ...	...	...	6,55,304	
Total disposal ... mds. ...	...	...	4,52,500	1,720,030

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1889-90—*(continued)*.

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet
Received by conversion in Depôt—(continued).				
Sal pieces ... ... stacks ..	431			
... ... cds. ...	246			
	1,630	10,674		
„ sleepers	87,567	131,350		
	23,946			
„ offcuts ... ... mds. ...	47,707	32,669		
„ botas	1,326	11,798		
	28			
„ half logs ... ... mds. ...	80	185		
„ logs	95	4,275		
Signal posts	10	124		
Sál slabs	1,579	...		
Asna scantlings	3,197	1,324		
	329			
„ offcuts ... ... mds. ...	100	885		
„ botas	27	324		
„ logs	102	4,998		
„ sleepers	61,649	92,473		
Haldu scantlings	31	9		
Sissu „	519	50		
„ offcuts	3	3		
„ botas	17	34		
			271,793	
Articles	4	4	St. 240	3,79,053
			mds. 51,787	
By transfer.				
	25,310			
Sal scantlings ... ... stacks ...	2			
... ... mds. ...	713	17,060		
	5,115	7,672		
„ sleepers	1,512	...		
„ planks ... ... mds. ...	2	82		
„ logs	9,806			
	16,200			
„ offcuts ... ... mds. ...	...	10		
Poles and saplings	17,643	...		
Firewood ... ... mds. ...				

Particulars.	No. or quantity.	Cubic feet	Total of each head. No or quantity.	Total of each head. Cubic feet
Balance at close of the year—Sale Depôts.				
Bahraighat Depôts. — Sál logs	736	24,423		
Sissu „	1	16		
Asna „ „	130	7,272		
Haldu „ „	2	133		
Sál scantlings	8,038	3,614		
Sissu „	318	121		
Asna „	157	47		
Haldu „	20	16		
Sal sleepers	4,035	6,052		
„ botas	266	2,686		
Asna „	23	208		
Sissu „	12	50		
	2,156			
Sil offcuts ... ... mds. ...	4,606			
	144			
Sissu „ ... ... mds. ...	54			
	36			
Asna „ „ ... mds. ...	38			
Haldu „	2	9		
Large boat	1			
			16,077	
Firewood	12,310	...	mds. 17,008	44,647
Drift timber	1,989	16,282	1,989	16,282
Lucknow Depôt. — Asna logs	6	261		
Sál sleepers	1,119	1,678		
Sissu scantlings	16	9		
Asna „	...	6		
Sál planks ... ... mds.	219			
	41			
„ offcuts ... ... mds	1,323			
Sissu „ ... ... mds.	21			
	466			
Sál „ ... ... mds. ...	110			
			1,648	
Firewood	mds. 796	..	mds. 2,469	1,954

Baib grass	mds. ...	70	...														
Asna logs	...	10	452														
„ scantlings	...	705	285														
Write-back	...	312	653	42,667	28,324												
				mds. 36,138													
Miscellaneous Receipts.																	
Miscellaneous poles	...	255															
Sissu scantlings	mds. ...	16															
		50															
		52															
Miscellaneous timber	mds. ...	12	...	323													
				mds. 62													
Total Receipts {	No. ...	...	...	445,618													
	mds. ...	...	...	596,040	1,268,709												
Grand Total {	No. ...	...	...	959,363													
	mds. ...	...	...	6,77,155	25,69,204												

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1889-90—(*concluded*).

Particulars.	No. or quantity.	Cubic feet	Total of each head	
			No. or quantity.	Cubic feet.

	Particulars.	No. or quantity.	Cubic feet.	Total of each head.	
				No or quantity.	Cubic feet.
Gonda Division.	Sál pieces	363	1,000		
	Asna „	19	95		
	„ bark ... ... mds. ...	19	...		
	Jamun log	27	108		
	Mahua „	90	984		
	Dhau dhura	167	82		
	Sal offcuts	364	123		
	Jamun offcuts	450	225		
	Dhau „	15	60		
	Sál bark ... ... mds. ...	9	...		
	„ poles	253	405		
	„ piles	22	467		
	Asna scantlings	541	628		
	Sál „	38	23		
	Fuel ... ... mds. ...	15,093	...		
	Minor produce ... ... „ ...	10	...		
				2,349	
	Baib ... ... mds. ...	835	...	mds. 15,965	4,200
Gorakhpur Division.	Sal poles and ridge poles	6,761	17,308		
	Asna poles	6,547	10,317		
	Jamun pieces and poles	6,040	22,167		
	Sál offcuts	4,164	4,359		
	„ logs	300	3,000		
	„ sleepers	23,445	35,167		
	„ scantlings	1,323	1,868		
	„ pieces	1	4		
	Sissu „	4	16		
	Firewood ... ... mds. ...	9,602	...		
		1,813			
	Drift timber of Gandak ... mds. ...	10	5,947		
		815			
	Drift timber of Rápti ... mds. ...	66	3,027		
				51,213	
	Minor produce ... ... mds. ...	5	...	mds. 9,683	103,175
	Total Balance ... { No. ...	...	...	303,971	
	{ mds. ...	...	...	1,62,724	850,032
	Grand Total ... { No. ...	...	...	9,59,275	
	{ mds. ...	...	...	6,15,220	2,570,062

E. WOOD, Captain,
Conservator of Forests, N.-W. P. & Oudh, Oudh Circle.

Form No. 57.

FOREST DEPARTMENT, NORTH-WESTERN PROVINCES AND OUDH, OUDH CIRCLE.

ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPÔTS FOR THE YEAR 1889-90.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favor of the year.	Against the year.	
I.—Reserved Forest Timber.			Rs.			Rs.	Rs.	Rs.	
Logs and pieces	438	24,828	16,838	875	32,105	11,948			
Sleepers and scantlings. Numbers ...	27,323	30,080	33,779	13,703	11,543	9,033			
Sleepers and scantlings. Maunds ...	278								
Poles and saplings	406	3,500	190	...	Mds 210	219			
Offcuts, slabs and pieces. Numbers ..	8,114	1,742	...	3,147	2,953	4,615			
Offcuts, slabs and pieces. Maunds ...	12,847	...	7,187	...	6,152	...			
Canoes and boats	8	...	800	...	...	...			
Drift collections	488	3,710	853	1,989	16,282	...			
Total, timber ... Numbers ...	36,777	69,860	59,047	19,714	62,883	25,815			
Total, timber ... Maunds ...	13,125	...	..	...	6,371	...			
Total firewood	34,648	...	6,240	...	13,106	2,210			
Grand Total... Numbers...	36,777	69,860	65,287	19,714	62,883	28,025	...	37,862	
Grand Total... Maunds ...	47,773	...	...	...	19,477	...			

Form No. 57A.

Abstract showing the value of timber and other produce at depôts other than sale depôts for the year 1889-90.

1.—*Reserved Forests.*								
Logs	8,626	347,105	1 97,031	15,860	327,725	1,36,241	...	60,790
Sleepers and scantlings ...	115,659	159,096	1,59,096	231,582	345,430	2,34,134	75,038	...
Poles and saplings	14,429	84,805	16,960	22,727	89,292	24,524	7,564	...
Offcuts slabs, &c.	336,023	633,556	18,802	10,871	15,728	711	...	18,091
Boats and canoes	508	...	20,925	589	...	33,565	12,640	...
Drift collection ... Numbers...	1,320	6,073	3,000	2,028	8,974	...	...	3,000
Drift collection ... Maunds ...	38	...	...	76	...	591	591	...
Total, timber ... Numbers ...	476,655	1,230,635	4,15,814	284,257	787,149	4,29,766	13,052	...
Total, timber ... Maunds ...	38	...						
Firewood ... Maunds ...	30,955	...	3,600	129,379	...	24,438	20,838	...
Charcoal ... Maunds ...	131	...	65	610	...	418	353	...
Total, firewood & charcoal, Maunds.	31,086	...	3,665	129,989	...	12,802	9,137	...
Minor produce Maunds ...	2,218	...	1,428	13,182	...	24,856	23,428	...
Numbers	1	...	...	...	...	...	...	...
Total Maunds ...	2,218	...	1,428	13,182	...	12,802	11,374	...
Total ... Numbers ...	1	...	...	...	...	...	...	...
Grand Total ... Number ...	476,656	1,230,635	4,20,907	284,257	787,149	4,29,766	8,859	...
Grand Total ... Maunds ...	33,342	...	...	143,312	436,517	37,658	37,658	...
ABSTRACT OF FORMS, NUMBERS 57 AND 57A.								
Timber ... Number ...	13,163	1,300.495	4,75,461	303,071	850,032	4,55,581	...	19,880
Timber ... Maunds ...	513,432	...	...	6,447	...	...	...	...
Firewood and charcoal ...	65,734	...	9,905	143,095	...	37,066	17,161	...
Minor produce ... Numbers ...	1	...	...	...	...	...	...	...
Minor produce ... Maunds ...	2,218	...	1,428	13,182	...	12,802	11,374	...
Total ... Numbers ...	513,433	1,300,495	4,86,794	303,071	850,032	4,95,449	8,655	...
Total ... Maunds ...	81,115	...	...	162,724	...	...	...	...

Naini Tal:
The 31st July 1890.

E. WOOD, Captain,
Conservator of Forests, N.-W. P. & Oudh, Oudh Circle.

[Form No. 57B.

FOREST DEPARTMENT, OUDH CIRCLE, N.-W. PROVINCES AND OUDH.

ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1889-90.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No.	C ft.	Value.	No.	C. ft.	Value.	In favour of the year.	Against the year.	
Direction Division.			Rs			Rs.	Rs.	Rs.	
Dead stock.									
3 Tools	1	...	1	1	...	1			
4 Office furniture ...	64	...	262	64	...	262			
5 Tents and equipages ..	5	...	200	5	...	200			
7 Miscellaneous	4	...	3	4	...	3			
Total ...	74	...	466	74	...	466			
Pilibhit Division.									
LIVE STOCK.									
Elephant	1	...	1,500	1	...	1,500			
Bullocks	...	...	...	...	...	...			
Dead stock.									
1 Surveying and other instruments,	45	...	16	71	...	20	4		
2 Machinery	2	...	25	2	...	25	...		
3 Tools	423	...	303	425	...	313	10		
4 Office furniture ..	14	...	62	15	...	65	3		
5 Tents and equipages ...	3	..	18	3	...	18	...		
7 Miscellaneous	480	...	895	1,168	...	900	5		
Country carts	...	...	...	...	...	...	...		
Buildings	8	...	8,000	8	...	8,000	...		
Total ...	976	...	10,819	1,693	...	10,841	22		
Bhira Sub-division.									
Live Stock.									
Bullocks	5	..	150	...	..	...	...	150	
Dead Stock.									
1 Surveying and other instruments,	110	..	110	73	...	109	...	1	
2 Machinery	2	...	448	2	...	448	...	...	
3 Tools	155	...	248	180	..	262	14	...	
4 Office furniture	68	...	122	68	...	122	...	...	
5 Tents and equipages ...	4	...	114	5	..	270	156	...	
6 Building materials, small stores and house fittings.	316	...	480	300	...	460	...	20	
7 Miscellaneous	200	...	160	222	...	277	117	...	
Country carts	2	—	30	..	...	...	...	30	
Buildings	11	...	9,800	11	...	9,800			
Total ...	873	...	11,722	870	...	11,808	287	201	

[Form No. 57B.

FOREST DEPARTMENT, OUDH CIRCLE, N.-W. PROVINCES AND OUDH.

ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1889-90—(*continued*).

Description of timber and other produce.	On hand at commencement of the year.			On hand at the close of the year.			Difference of value.		Remarks.
	No.	C.ft.	Value.	No.	C.ft.	Value.	In favour of the year.	Against the year.	
Kheri Division.			Rs.			Rs.	Rs.	Rs.	
Live Stock.									
Elephants	2	...	3,800	2	...	3,800	...	...	
Bullocks	2	...	95	2	...	95	...	...	
Buffaloes	1	...	8	...	...	...	...	8	
Dead Stock.									
1 Surveying and other instruments,	32	...	906	32	...	920	14	...	
3 Tools	2,491	...	1,843	2,174	...	1,680	...	163	
4 Office furniture	276	...	943	256	...	943	...	...	
5 Tents and equipages ...	17	...	942	17	...	942	...	...	
6 Building materials, small stores and house fittings.	1,423	...	1,752	37,572	...	1,832	80	...	
7 Miscellaneous	985	...	1,009	874	...	848	...	161	
Country carts	2	...	38	2	...	38	...	...	
Buildings	12	...	35,145	12	...	35,145	...	...	
Total ...	5,243	...	46,481	40,943	...	46,243	94	332	
Bahramghat Division.									
Live Stock.									
Buffaloes	9	...	90	10	..	105	15	...	
Dead Stock.									
1 Surveying and other instruments.	40	...	121	40	...	121	...	...	
2 Machinery	51	...	39,395	51	...	39,395	...	...	
3 Tools	859	...	3,519	782	...	3,394	...	125	
4 Office furniture	71	...	469	75	...	482	13	...	
6 Building materials, small stores and house fittings.	73	...	67	73	...	67	...	...	
7 Miscellaneous	...	...	613	...	...	355	...	258	
Timber transport carts ...	2	...	250	2	...	250	...	...	
Country carts	10	...	125	10	...	125	...	...	
Buildings	2	...	9,500	2	...	9,500	...	...	
Total ...	1,126	...	54,149	1,054	...	53,794	28	383	
Bahraich Division.									
Live Stock.									
Elephant	1	...	2,600	1	...	2,600	...	...	
Dead Stock.									
1 Surveying and other instruments,	86	...	141	77	...	83	...	58	
3 Tools	1,631	...	893	1,426	...	700	...	193	
4 Office furniture	285	...	1,111	288	...	1,125	14	...	
5 Tents	6	...	489	5	...	439	...	50	
6 Building materials, small stores and house fittings.	47	...	40	47	...	40	...	...	
7 Miscellaneous	313	...	494	284	...	447	...	47	
Buildings	32	...	41,500	32	...	43,433	1,933	...	
Total ...	2,401	...	47,268	2,160	...	48,807	1,947	348	

[Form No. 57B.

FOREST DEPARTMENT, OUDH CIRCLE, N.-W. PROVINCES AND OUDH.

ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1889-90—(*concluded.*)

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No.	C. ft.	Value.	No.	C. ft.	Value.	In favour of the year.	Against the year.	
Gonda Division.			Rs.			Rs.	Rs.	Rs.	
Live Stock.									
Elephant									
Buffaloes									
Dead Stock.									
1 Surveying and other instruments,	19	...	85	31	...	151	66	...	
3 Tools	350	...	232	354	...	257	25	...	
4 Office furniture	131	...	488	151	...	568	80	...	
5 Tents and equipages ...	6	...	525	6	...	525	...	...	
6 Building materials, small stores and house fittings.	23	...	18	23	...	18	...	...	
7 Miscellaneous	33	...	58	33	...	60	2	...	
Buildings	3	...	6,500	3	...	6,500	...	...	
Total ...	565	...	7,906	601	...	8,079	173	...	
Gorakhpur Division.									
Live Stock.									
Elephant	1	...	1,000	2	...	2,400	1,400	...	
Dead Stock.									
1 Surveying instruments ...	83	...	247	83	...	247	...	...	
2 Machinery	1	...	150	1	...	150	...	...	
3 Tools	296	...	481	296	...	481	...	...	
4 Office furniture	50,692	...	1,567	50,736	...	1,784	217	...	
5 Tents and equipages ...	10	...	563	10	...	563	...	...	
7 Miscellaneous	129	...	209	129	...	209	...	...	
Buildings	10	...	10,500	11	...	11,830	1,330	...	
Total ...	51,222	...	14,717	51,268	...	17,664	2,947	...	
GRAND TOTAL ...	64,480	...	1,93,528	98,663	...	1,97,762	...	...	
Abstract of the Circle.									
Live Stock.									
Elephants	5	...	8,900	6	...	10,300	1,400	...	
Bullocks	7	...	245	2	...	95	...	150	
Buffaloes	10	...	98	10	...	105	7	...	
Total ...	22	...	9,243	18	...	10,500	1,257	...	
Dead Stock.									
1 Surveying and other instruments,	424	...	1,626	416	...	1,651	25	...	
2 Machinery	56	...	40,018	56	...	40,018	...	...	
3 Tools	6,206	...	7,520	5,647	...	7,088	...	432	
4 Office furniture	51,601	...	5,024	51,653	...	5,351	327	...	
5 Tents and equipages ...	51	...	2,851	51	...	2,957	106	...	
6 Building materials, small stores and house fittings.	1,882	...	2,357	38,015	...	2,417	60	...	
7 Miscellaneous	2,144	...	3,441	2,714	...	3,099	...	342	
Timber transport carts ...	2	...	250	2	...	250	...	...	
Country carts	14	...	193	12	...	163	...	30	
Buildings	78	...	1,21,005	79	...	1,24,268	3,263	...	
Total ...	62,458	...	1,84,285	98,645	..	1,87,262	2,977	...	
GRAND TOTAL ...	64,480	...	1,93,528	98,663	...	1,97,762	4,234	...	

NAINI TAL:
The 31st July 1890.

E. WOOD, CAPTAIN,
Conservator of Forests, N.-W. P. & Oudh, Oudh Circle.

FOREST DEPARTMENT, NORTH-WESTERN PROVINCES AND OUDH, OUDH CIRCLE. [Form No. 58.

SUMMARY OF REVENUE OF THE DIFFERENT DIVISIONS DURING 1889-90.

Budget Heads.	Direction.	Kheri Division.	Bhira Division.	Bahramghát Division.	Bahraich Division.	Gonda Division.	Gorakhpur Division.	Pilibhít Division.	Total
RECEIPTS.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the Forests by Government Agency—									
a. Timber	...	20,953 11 9	905 9 9	2,82,192 1 0	6,933 14 5	700 1 3	27,982 7 6	35 8 9	3,39,703 6 5
b. Firewood and charcoal	...	...	10,016 14 1	...	4,005 8 7	7,646 9 7	29,438 6 1	931 2 9	52,038 9 1
c. Bamboos	...	...	...	...	...	...	...	...	...
d. Sandal wood	...	...	...	...	...	...	...	...	...
e. Grass and other minor produce	...	...	3,318 0 3	...	16,631 8 3	5,075 3 0	11 0 0	125 3 2	25,160 14 8
II.—Timber and other produce removed from the Forests by consumers or purchasers—									
a. Timber...	...	21,455 5 5	516 8 3	...	1,02,664 9 7	12,782 2 3	2,142 4 3	1,434 5 9	1,40,995 3 6
b. Firewood and charcoal	...	380 5 6	348 1 0	...	1,455 6 0	1,454 12 8	1,686 6 4	992 4 9	6,317 4 3
c. Bamboos	...	...	...	...	192 2 6	...	25 2 5	...	217 4 11
d. Grazing and fodder grass	...	10,968 0 2	560 8 9	...	9,179 10 9	12,977 13 11	10,493 0 6	1,191 9 0	45,370 11 1
e. Other minor produce	...	14,468 10 3	729 0 9	...	6,703 6 9	8,228 11 6	16,543 1 1	1,278 1 3	47,950 15 7
III.—Drift and waif wood and confiscated forest produce,	...	277 2 9	84 6 0	4,991 12 6	730 0 10	3,764 14 2	10,211 6 4	133 0 7	20,192 11 2
IV.—Revenue from Forests not managed by Government—									
a. Duty on foreign timber and other forest produce ...	...	...	...	...	...	...	...	...	...
b. Revenue from shared and private forests ...	...	...	...	...	...	...	...	...	...
V.—Miscellaneous—									
a. Fines and forfeitures	...	...	79 14 0	...	228 3 6	...	723 8 0	...	1,036 9 6
b. Refunds	...	212 7 7	...	...	720 12 4	9 8 0	85 11 7	...	1,028 7 6
c. Other sources	...	3,952 5 5	611 4 8	870 4 4	448 0 0	180 11 2	2,201 12 9	279 7 0	8,543 13 4
Total, Receipts ...	...	72,668 0 10	17,170 3 6	2,88,054 1 10	1,49,893 3 6	52,820 7 6	1,01,549 2 10	6,400 11 0	6,88,555 15 0

[Form No. 58.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

SUMMARY OF EXPENDITURE OF THE DIFFERENT DIVISIONS DURING 1889-90.

Budget Heads.	Direction.	Kheri Division.	Bhira Division.	Bahramghát Division.	Bahraich Division.	Gonda Division.	Gorakhpur Division.	Pilibhít Division.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—CONSERVANCY AND WORKS.									
I.—Timber and other produce removed from the Forests by Government Agency—									
a. Timber	...	1,39,750 5 7	639 12 2	24,563 14 5	722 14 1	777 4 1	18,254 9 3	...	1,84,708 11 7
b. Firewood and charcoal	...	...	6,950 6 2	...	1,014 0 0	4,480 1 9	21,457 4 11	1,783 2 4	35,684 15 2
c. Bamboos	...	...	...	...	...	...	0 12 0	...	0 12 0
d. Sandal wood	...	...	...	...	...	...	...	...	...
e. Grass and other minor produce	...	...	4,337 14 4	...	13,101 9 2	3,377 14 7	...	36 4 11	20,853 11 0
II.—Timber and other produce removed from the Forests by consumers or purchasers.	...	1,847 2 2	2,149 12 5	...	2,130 13 9	1,880 4 2	1,689 6 7	2,342 7 7	12,039 14 8
III.—Drift and waif wood and confiscated forest produce	...	...	...	1,565 1 8	...	92 0 0	5,438 8 2	...	7,095 9 10
IV.—Revenue from Forests not managed by Government—									
a. Duty on foreign timber and other forest produce ...	...	...	...	...	...	...	...	...	...
b. Revenue from shared and private forests ...	...	...	...	...	...	...	...	...	...
V.—Rent of leased forests and payments to shareholders in Forests managed by Government.	...	...	...	...	...	...	...	...	...
VI.—Live stock, stores, tools and plant—									
a. Purchase of cattle	...	...	...	15 0 0	...	...	..	...	15 0 0
b. Feed and keep of cattle	...	1,366 4 11	...	717 0 6	606 5 5	4 12 0	662 5 2	522 10 11	3,879 6 11
c. Purchase of stores, tools and plant	...	282 13 6	428 7 6	375 1 2	43 11 0	193 9 7	235 14 0	25 2 0	1,584 10 9
VII.—Communications and Buildings—									
a. Roads and bridges	...	6,636 14 3	522 14 10	189 14 3	1,862 9 3	839 1 0	364 7 11	943 11 0	11,359 8 6
b. Buildings	...	2,105 2 11	515 14 5	565 3 10	2,848 12 6	4,122 13 3	3,106 4 3	1,022 5 9	14,286 8 11
c. Other works	...	540 12 7	48 5 0	...	482 14 7	55 1 2	251 15 10	66 14 0	1,445 15 2

VIII.—Demarcation, improvement and extension of forests—											
a. Demarcation	...	1,107 13 2	198 0 6	...	486 9 7	321 7 0	170 8 6	238 1 9	2,522 8 6
b. Compensation for land and rights	...	...	...	...	...	...	51 11 10	...	51 11 10
c. Surveys and working plans	...	544 0 0	77 6 3	...	...	...	...	...	621 6 3
d. Sowing and planting	...	217 0 2	72 7 0	...	...	89 14 6	3,366 9 5	...	3,745 15 1
e. Protection from fire	...	4,211 15 6	1,683 12 1	...	3,008 4 6	690 2 3	1,770 0 9	1,734 11 0	13,098 14 1
f. Other works	...	...	613 0 0	...	1,180 0 6	309 4 7	8,203 4 7	119 5 4	10,424 15 0
IX.—Miscellaneous—									
a. Refunds	...	...	...	108 2 5	...	...	...	...	108 2 5
b. Law charges	...	...	...	4 9 0	...	...	109 0 0	...	113 9 0
c. Other charges	...	1,211 0 0	144 14 4	59 11 3	27 10 3	114 0 7	222 10 10	40 13 0	1,820 12 3
Total A.—Conservancy and Works	..	1,59,821 4 9	18,382 15 0	28,163 10 6	27,516 2 7	17,347 10 6	65,355 6 0	8,875 9 7	3,25,462 10 11
B.—ESTABLISHMENT.									
I.—Salaries—									
a. Conservators	...	18,000 0 0	...	...	...	...	...	...	18,000 0 0
b. Superior officers	...	...	13,593 15 6	350 0 0	2,800 0 0	6,377 6 9	2,799 3 11	8,400 0 0	10,392 12 8	44,713 6 10
c. Subordinate forest and depôt establishments	...	..	4,029 0 7	1,693 2 7	102 0 0	3,628 4 6	2,299 3 2	3,879 10 9	1,067 12 1	16,699 1 8
d. Office establishments	...	2,198 2 8	2,743 6 4	189 2 1	540 0 0	1,176 5 8	446 0 0	279 5 7	708 0 11	8,280 7 3
e. Deputation and special allowances	...	...	50 0 0	...	...	...	...	...	...	50 0 0
II.—Travelling Allowances—									
a. Conservators	...	1,274 15 7	...	...	...	...	...	...	...	1,274 15 6
b. Superior officers	...	...	2,079 2 9	133 0 0	383 14 8	1,459 7 0	619 4 8	2,178 11 6	1,376 2 0	8,229 10 7
c. Subordinate forest and depôt establishments	...	...	825 1 6	358 7 8	1 2 8	665 4 8	407 2 11	...	41 13 4	2,299 0 9
d. Office establishments	...	400 10 11	534 14 1	108 3 6	3 14 8	324 13 8	71 7 2	28 13 4	317 12 0	1,790 9 4
III.—Contingencies—									
a. Stationery	...	0 13 3	18 14 0	5 5 0	15 7 7	13 7 6	8 11 0	2 3 0	7 11 9	72 9 1
b. Carriage of tents and records	...	105 0 9	104 0 0	77 12 3	...	187 10 0	139 8 7	84 11 0	83 14 9	842 9 4
c. Rents, rates and taxes	...	210 0 0	7 8 0	102 0 0	...	0 8 6	100 0 0	100 0 0	105 0 0	625 0 6
d. Pay of police guards	...	...	198 4 4	...	188 10 8	120 0 0	118 7 8	53 3 5	92 10 9	771 4 10
e. Official postage	...	223 8 6	80 6 0	62 5 0	133 15 0	79 4 6	94 4 6	168 4 6	92 2 6	934 2 6
f. Sundries	...	315 6 3	429 14 10	112 14 5	240 11 3	442 13 3	244 14 6	231 12 1	62 13 6	2,081 4 1
Total B.—Establishments	...	22,788 9 10	24,694 7 11	3,192 4 6	4,409 12 6	14,475 6 0	7,348 4 1	15,406 11 2	14,348 10 3	1,06,664 2 3
Grand Total of Expenditure	...	22,788 9 10	1,84,515 12 8	21,575 3 6	32,573 7 0	41,991 8 7	24,695 14 7	80,762 1 2	23,224 3 10	4,32,126 13 2

Calcutta:
The 24th June 1890.

J. BRIDGNELL,
Chief Supdt. in charge, Forests Branch.

BENGAL SECRETARIAT LIBRARY

FOREST DEPARTMENT, OUDH CIRCLE, N.-W PROVINCES AND OUDH.

Dr. ACCOUNT CURRENT FOR THE YEAR 1889-90. Cr.

		Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
To Cash Balance		...	115 13 3	*By Expenditure as per Annual Summary Form No.* 58 ...	...	4,32,126 13 2
„ *VIII.—Assessed Taxes*—						
Income Tax—Deductions from salaries		...	1,755 1 11	„ *Deposits*	...	105 10 0
„ *Revenue as per Annual Summary Form No.* 58		...	6,88,555 15 0	„ *Forest Cash Remittances, Local*—		
„ *Service Funds*—						
Civil Fund—Ordinary (Bengal)		...	...	Remittances to Treasuries	5,62,213 4 1	...
Ditto Additional (do.)		...	...	Inter-divisional Transfers	57,101 9 3	...
Military Fund (Bengal)		...	...			6,19,314 13 4
Ditto (Madras)		...	...	„ *Advances Recoverable*	...	4,31,833 12 10
Ditto Orphan Fund (Bengal)		...	...	„ *Suspense*	...	80 0 0
Uncovenanted Service Family Pension Fund (Bengal) ...		337 0 0	...	„ *Account Current (other Governments)*—		
General Family Pension Fund		...	...	Remittances to the Government of India	703 12 4	...
Hindu Family Annuity Fund		...	...	Ditto ditto Bengal	2,501 6 5	...
			337 0 0	Ditto ditto Panjáb	12,453 2 4	...
„ *Deposits*		...	154 14 0			15,658 5 1
„ *Forest Cash Remittances, Local*—						
Forest cheques drawn		4,58,492 3 2	...	„ *Inter-departmental Transfers*—		
Inter-divisional Transfers		56,440 13 8	...	Public Works Department, State Railways	...	...
			5,14,933 0 10	Rajputana Malwa Railway ... Rs.	1,02,080 0 0	...
„ *Advances recoverable*		...	4,30,389 3 2	North-West Railway, Panjáb Section „	12,127 7 6	...
„ *Suspense*		...	38 10 0	Ditto Ordinary Branches „	17,180 8 3	...
„ *Account Current (other Governments)*—						...
Remittances from Government of India		1,382 2 2	...		1,31,387 15 9	...
Ditto ditto Bengal		5,818 15 10	...			
„ *Inter-departmental Transfers*—			7,201 2 0			
Public Works Department State Railways		...	...	Military Department (Bengal)	8,176 8 6	...
Lucknow-Sitapur and Seramow Railway Rs.	119 14 7	...	...	Civil Department	...	...
Ditto Ordinary Branches „	20 8 0	...	...	Jails ... ... Rs.	5,428 1 5	...
		140 6 7	...	Miscellaneous ... ... „	132 7 8	...
Military Department		...	...		...	1,45,125 1 4
Civil Department—						
Jail ... ... Rs.	374 4 6	...	..		5,560 9 1	...
Mathematical Instrument Department „	141 12 0	...	...			
Miscellaneous ... ... „	505 15 0	...	...			
		1,021 15 6	1,163 6 1	*Cash balance*	...	448 10 6
Total		...	16,44,643 2 3	Total	...	16,44,643 2 3

CALCUTTA :
The 24th June 1890.

J. BRIDGNELL,
Chief Supdt. in charge, Forest Branch.

[Form No. 60.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

REVENUE RECEIVED AND OUTSTANDINGS ON ACCOUNT OF REVENUE DURING 1889-90.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	Remarks.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Pilibhit	Timber, grazing and other Forest produce ..	192 15 1	6,400 11 0	6,593 10 1	6,400 11 0	192 15 1	This sum of Rs. 192-15-1, is consisted of two items, viz.— Rs. a p. (a) ... ... 74 0 0 (b) ... ... 118 15 1 Total ... 192 15 1
Bhira	Ditto ditto ...	2,060 3 11	15,505 1 11	17,565 5 10	17,170 3 6	* 395 2 4	
Kheri	Ditto ditto ...	3,326 3 0	72,196 4 4	75,522 7 4	72,668 0 10	2,854 6 6	
Babráighát ...	Ditto ditto ...	...	2,94,206 10 6	2,94,206 10 6	2,88,054 1 10	6,152 8 8	(a) This sum has been written off by Local Government No. $\frac{386F}{119-A-2}$ of 19th April 1890.
Bahraich	Ditto ditto ...	2,435 15 4	1,51,973 15 6	1,54,409 14 10	1,49,893 3 6	4,516 11 4	(b) Out of this sum Rs. 28-2-4 has been written of by Local Government No. $\frac{2F}{116-A-2}$ of 12th April 1890, and the reminder Rs 80-12-9 has been recovered from the Paper Mills.
Gonda	Ditto ditto ...	161 3 0	53,625 12 6	53,786 15 6	52,823 7 6	963 8 0	
Gorakhpur ...	Ditto ditto ...	3,357 15 0	1,07,411 3 11	1,10,769 2 11	†1,07,368 2 8	3,401 0 3	
	Total ...	11,534 7 4	7,01,319 11 8	7,12,854 3 0	6,94,377 14 10	18,476 4 2	

* Of this sum Rs. 144-6-6 have been written off by Local Government No. $\frac{386F}{119-A-2}$ of 19th April 1890.

† Includes Bengal share of drift of Rs. 5,819-2-4.

NAINI TAL:
Dated the 31st July 1890.

E. WOOD, CAPTAIN,
Conservator of Forests, N.-W. P. and Oudh, Oudh Circle.

[Form No. 61.

FOREST DEPARTMENT, N.-W. P. AND OUDH, OUDH CIRCLE.

OUTSTANDINGS AND LIABILITIES ON ACCOUNT OF CONTRACTORS AND DISBURSERS FOR 1889-90.

Division.	Department Debtor.			Department Creditor.			Balance due	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (outstandings).	By Department (liabilities).
	Rs a p	Rs. a. p	Rs. a. p.	Rs a. p	Rs a p	Rs. a p	Rs. a p	Rs. a. p.
Direction ...	.	2,414 1 3	2,414 1 3	166 5 11	2,259 6 10	2,425 12 9	11 11 6	...
Kheri ...	12 12 3	2,26,728 2 4	2,26,740 14 7	22,457 0 9	2,23,662 5 9	2,46,119 6 6	19,378 7 11	...
Bhira .	. .	31,378 3 9	31,378 3 9	3,463 11 6	20,720 8 8	33,184 4 2	1,806 0 5	...
Bahramghát,	...	10,004 7 5	10,004 7 5	822 7 11	9,588 6 5	10,410 14 4	406 6 11	...
Bahraich ..	0 5 0	40,857 1 0	40,857 7 0	4,394 10 5	40,470 8 7	44,865 3 0	4,008 1 3	0 5 9
Gonda ..	...	30,505 8 5	30,505 8 5	4,390 15 11	34,171 14 7	38,562 14 6	8,057 6 1	...
Gorakhpur,	..	75,358 3 6	75,358 3 6	10,019 4 5	70,975 4 5	89,994 8 10	14,636 5 4	...
Pilibhít ...	...	13,143 6 9	13,143 6 9	1,442 2 9	11,985 5 7	13,427 8 4	284 1 7	...
Total ..	13 2 0	1,30,389 8 2	1,30,402 5 2	47,156 11 7	1,31,833 12 10	1,78,990 8 5	48,588 9 0	0 5 9

CALCUTTA:
The 24th June 1890.

J. BRIDGNELL,
Chief Superintendent in charge of Forests Branch.

[Form No 62.

FINANCIAL RESULTS OF THE YEAR 1889-90.

Division.	Timber and other produce removed from the forest by Government Agency.		Other revenue.		Formation, protection and improvement of forests.	Total.	
	Receipts	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	Rs	Rs.	Rs.	Rs.	Rs	Rs	Rs.
Pilibhít	1,092	1,819	5,309	12,092	11,845	6,401	25,756
Bhira Sub-division ..	14,241	11,928	2,930	5,813	6,337	17,171	24,108
Kheri	3,00,008	1,88,823	51,714	15,814	20,018	3,60,722	2,24,685
Bahraich ...	27,571	14,838	1,22,822	14,837	17,381	1,49,893	47,056
Gonda	13,421	8,635	39,399	9,577	9,016	52,820	27,228
Gorakhpur ...	57,432	39,713	44,117	16,572	25,009	1,01,540	83,294
Total ...	4,22,765	265,756	2,65,791	76,735	89,636	6,88,556	4,32,127

NAINI TAL:
The 31st July 1890.

E. WOOD, CAPTAIN,
Conservator of Forests, N.-W. P. & Oudh, Oudh Circle.

Appendix I.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

STATEMENT OF FOREST PRODUCE GIVEN FREE TO PRIVILEGED VILLAGERS DURING 1889-90.

Division.	Description of produce.		Number or quantity.	Cubic feet	Amount.	Remarks.
					Rs a p.	
PILIBHIT.	Timber	Bullocks	29,426	147,130	18,442 12 0	
		Number	2	4	0 8 0	
	Firewood mds.	Cart loads	30,770	61,540	1,538 7 0	
	Minor produce	Bullocks	6,504	...	1,009 4 0	
		Head loads	1,021	...	34 12 0	
		Grazing	6,673		904 8 6	
	Total	Bullocks	35,930	208,674	22,590 3 6	
		Numbers	2			
		Cart loads	30,770			
		Head loads	1,021			
		Grazing	6,673			
BIJNA.	Timber	Numbers	5,584	13,024	571 9 0	
		Cart loads	687	34,370	344 0 0	
		Head loads	302	784	24 8 0	
	Firewood	Cart loads	1,105	49,112	302 8 0	
		Head loads	451	902	7 0 9	
	Minor produce	Cart loads	2,682	...	505 6 0	
		Head loads	969	...	32 9 6	
	Total	Numbers	5,584	98,192	1,877 9 3	
		Cart loads	4,564			
		Head loads	1,812			
KHERI.	Timber	Numbers	127	227,731	69 14 0	
		Cart loads	11,177		11,446 12 0	
		Head loads	307		0 9 0	
	Firewood	Cart loads	7,747	203,101	820 12 6	
		Head loads	177		1 14 11	
	Minor produce	Cart loads	16,556	...	5,497 4 0	
		Head loads	599	...	24 15 3	
		Grazing	5,387		754 15 6	
	Total	Numbers	127	430,832	18,626 1 2	
		Cart loads	35,480			
		Head loads	1,083			
		Grazing	5,387			
BAHRAICH.	Timber	Numbers	413,940	774,879	30,143 1 5	
	Firewood	Cart loads	563	12,915	137 13 0	
	Minor produce mds.	Ditto	90,489½	..	2,822 5 0	
	Total	Numbers	413,940	787,824	33,103 3 5	
		Cart loads	91,052½			
GONDA.	Timber	Numbers	100,254	117,076	11,025 0 0	
	Firewood	Cart loads	9,624	54,868	468 0 0	
	Minor produce mds.	Ditto	13,956	...	231 0 0	
		Fodder of Elephants,	8 500	...	1,750 0 0	
	Total	Numbers	100,254	171,944	13,474 0 0	
		Cart loads	23,180			
		Fodder of Elephants,	8,500			
	Grand Total	Bullocks	35,930	1,696,966	89,671 1 4	
		Numbers	525,907			
		Cart loads	185,644½			
		Head loads	3,916			
		Grazing	15,560			
	Abstract of the Circle.					
	Timber		567,896	1,314,408	72,077 9 5	
	Firewood		50,827	3,82,468	3,276 8 2	
	Minor produce		132,676½	...	12,597 7 9	
	Grazing		15,560	...	1,719 8 0	
	GRAND TOTAL		766,959½	1,696,966	89,671 1 4	

E. WOOD, CAPTAIN,

Conservator of Forests, N.-W. P. & Oudh, Oudh Circle.

NAINI TAL :
The 31st July 1890

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

ABSTRACT SHOWING EXISTING ROADS AND FIRE LINES TO THE END OF MARCH 1890.

Description of lines and roads.	Pilibhít.		Bhíra.		Kheri.		Babraich.		Gonda.		Babramghát		Gorakhpur		Total.		Remarks.
	Miles.	Furlongs.	Miles.	Furlongs.	Miles.	Furlongs.	Miles.	Furlongs.	Miles.	Furlongs.	Miles.	Furlongs.	Miles.	Furlongs.	Miles.	Furlongs.	
Main roads 100′ wide	...	...	...	...	...	...	...	...	9	2	...	...	...	...	9	2	
,, ,, 50′ ,,	...	...	...	...	...	...	...	...	...	...	...	...	7	...	7	...	
,, ,, 45′ ,,	...	...	...	...	...	...	23	1	...	...	..	...	...	...	23	1	
,, ,, 40′ ,,	...	...	...	...	...	...	...	...	25	...	...	...	...	...	25	...	
,, ,, 30′ ,,	...	...	6	4	...	...	56	4	40	...	...	...	13	5	116	5	2 miles 1 furlong widened from 15′ to 30′.
,, ,, 20′ to 40′ ,,	...	..	23	...	...	..	..	...	19	4½	...	...	...	...	42	4½	
,, ,, 20′ ,,	...	...	...	...	17	4	32	1	3	5	...	...	8	...	61	2	
Cart ,, 18′ ,,	...	...	...	..	39	4	...	...	...	...	...	...	...	...	39	4	
,, ,, 15′ ,,	160	2	106	4½	213	6	233	1	59	6	...	.	30	5	804	1½	
,, ,, 12′ ,,	...	...	...	...	..	...	...	...	...	..	...	6	..		...	6	
Path ,, 10′ ,,	...	...	...	...	18	3	...	...	...	...	...	...	..	...	18	3	
,, ,, 8′ ,,	52	1	36	...	..	...	...	...	..	...	...	...	...	...	88	1	
Export ,, 6′ ,,	...	...	...	...	...	...	...	...	18	3	...	...	...	...	18	3	
Inspection paths ...	...	...	...	...	...	...	...	...	..	...	...		...	...	...	...	
Export roads 3′ wide and under ...	3*	7	54	½	...	...	...	...	10	...	...	...	...	...	67	7½	* Not yet used.
1889-90 ...	216	2	226	1½	289	1	344	7	185	4½	...	6	59	2	1,321	7½	
1888-89 ...	211	6½	222	5½	289	1	344	7	150	...	...	...	59	2	1,277	6	
New roads during 1889-90 ...	4	3½	3	4	...	...	...	...	35	4½	..	6	...	..	41	1½	

NAINI TAL:
The 31st July 1890.

E. WOOD, CAPTAIN,
Conservator of Forests, N.-W. P. & Oudh, Oudh Circle.

Appendix III.

FOREST DEPARTMENT, NORTH-WESTERN PROVINCES AND OUDH, OUDH CIRCLE.

LIST OF BUILDINGS UP TO END OF 1889-90.

Description of houses.	Pilibhít.	Bhira.	Kheri.	Bahramghát.	Bahraich.	Gonda.	Gorakhpur.	Total.	Remarks.
1st Class double storied ...	1	2	6	...	3	1	...	13	
„ „ single „ ...	...	...	1	2	5	...	1	9	
2nd „ double „ ...	...	...	5	...	...	1	...	6	
„ „ single „ ...	...	...	...	...	...	...	9	9	
3rd „ double „ ...	7	6	...	...	...	...	1	14	
„ „ single „ ...	...	...	...	1	9	2	...	12	
Total ...	8	8	12	3	17	4	11	63	
Total up to end of 1888-89 ...	8	8	12	2	17	4	10	61	
New houses during 1889-90 ..	...	...	...	1	...	...	1	2	

Appendix IV.

LIST OF WELLS UP TO END OF 1889-90.

Divisions.	Description of wells.			Total.	Remarks.
	Masonry pakka.	Kachcha.	Wooden.		
Pilibhít	16	7	...	23	
Bhira	20	2	1	23	
Kheri	42	...	1	43	
Bahramghát	3	...	...	3	
Bahraich	21	...	2	23	
Gonda	5	...	...	5	
Gorakhpur	10	...	...	10	
Total ...	117	9	4	130	

NAINI TAL:
The 31st July 1890.

E. WOOD, CAPTAIN,
Conservator of Forests, N.-W. P. & Oudh, Oudh Circle.

Appendix V.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

THE MAIN FACTS OF THE YEAR'S WORK MAY BE SUMMARIZED AS FOLLOWS, AS PER GOVERNMENT ORDER No. $\frac{642}{845\text{-}5}$, DATED 10TH OCTOBER 1888.

		1889-90.	1888-89.	Increase	Decrease.
1	Green trees felled	3,84,048	12,06,021	...	8,21,073
2	Yield of above in timber and fuel...	21,16,497	14,28,945	6,87,552	...
3	Yield of timber, including timber from dry trees ...	24,50,113	24,62,265	...	13,211
4	Value of above	3,80,131	4,10,377	...	21,246
5	Yield of green timber...	20,32,786	22,04,270	...	1,71,484
6	Value of above	3,20,885	2,70,619	50,266	...
7	Yield of dry timber	4,17,327	2,57,995	1,59,332	...
8	Value of above	68,246	1,39,758	...	71,512
9	Yield of green timber removed by Departmental Agency ...	4,90,241	3,57,792	1,32,449	...
10	Value of above	1,78,203	1,28,108	50,095	...
11	Yield of green timber removed by exporters	3,60,106	3,97,908	...	37,802
12	Value of above	79,342	66,401	12,941	...
13	Yield of green timber removed by free grantees and right-holders.	11,82,430	14,48,570	...	2,66,131
14	Value of above	63,280	76,050	...	12,770
15	Yield of dry timber removed by exporters	2,85,268	1,86,409	98,859	...
16	Value of above	59,449	1,28,531	...	69,082
17	Yield of dry timber removed by free grantees and right-holders.	1,32,059	1,29,468	2,595	...
18	Value of above	8,797	11,227	...	2,430
19	Yield of firewood and charcoal	18,95,173	16,66,680	2,28,493	...
20	Value of above	73,187	36,000	37,187	...
21	Yield of fuel removed by Departmental Agency ...	10,52,577	2,76,954	7,75,623	...
22	Value of above	63,667	20,226	43,441	...
23	Yield of fuel removed by exporters	4,60,128	8,20,634	...	3,60,506
24	Value of above	6,243	10,750	...	4,507
25	Yield of fuel removed by free grantees and right-holders ...	3,82,468	5,69,092	...	1,86,624
26	Value of above	3,277	5,024	...	1,747
27	Timber sold by Departmental Agency	1,71,101	3,79,114	...	2,08,013
28	Value of above	70,818	2,68,006	...	1,97,188
29	Timber sold direct to purchasers	6,30,622	5,26,439	1,04,183	...
30	Value of above	1,37,078	90,125	46,953	...
31	Fuel sold by Departmental Agency	6,62,316	1,35,342	5,26,974	...
32	Value of above	49,963	31,748	18,215	...
33	Fuel sold direct to purchaser	4,60,128	8,20,634	...	3,60,506
34	Value of above	8,322	10,143	...	1,821
35	Bamboos	31,452	132	31,320	...
36	Value of above	217	186	31	...
37	Minor produce and grazing	1,09,733	1,12,135	...	2,402
38	Value of other receipts	9,807	10,374	...	567
39	Yield per square mile in cubic feet of timber and fuel ...	3,031	3,432	199	...
40	Value of above per square mile	482	370	112	...
41	Gross receipts, ditto	572	449	123	...
42	Net receipts ditto	213	...	...	...

NAINI TAL:
The 31st August 1890.

E. WOOD, CAPTAIN,
Conservator of Forests, N.-W. P. and Oudh, Oudh Circle.

No. 46.

FROM

CECIL BAGSHAWE,

CONSERVATOR OF FORESTS, SCHOOL CIRCLE,

N.-W. PROVINCES AND OUDH,

To

THE CHIEF SECY. TO GOVERNMENT, N.-W. P. AND OUDH,

REVENUE (FORESTS) DEPARTMENT.

Dated Dehra Dún, 18th June 1890.

SIR,

I HAVE the honour to submit the Forest Administration Report of the School Circle for 1889-90.

I have the honour to be,

SIR,

Your most obedient servant,

C. BAGSHAWE,

Conservator of Forests, School Circle,

North-Western Provinces and Oudh.

SCHOOL CIRCLE REPORT.

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N.-W. PROVINCES AND OUDH.

SCHOOL CIRCLE.

ANNUAL PROGRESS REPORT

OF

FOREST ADMINISTRATION

FOR THE YEAR 1889-90.

BENGAL SECRETARIAT LIBRARY.

INTRODUCTION.

1. THE year has been one of considerable progress and improvement throughout the circle.

The provisions of the working plans have been carried out, generally with satisfactory results.

Fire conservancy has been more successful than in recent years. The yield in timber and fuel per square mile has risen by 376 cubic feet and now stands at 4,475 cubic feet; the net revenue per square mile has increased by Rs. 52 and now stands at Rs. 557, and the surplus revenue amounts to Rs. 1,61,556, the highest sum yet obtained, while the expenditure is below the average of the past eight years.

CHAPTER I.

Area and Boundaries.

I.—Area.

2. The area of the circle stood as follows on the 31st March 1890 :—

	Acres.	Square miles.
Reserved forests	462,752	724
Leased ditto	49,740	78
Unclassed state forests	8,732	13
Total, 1889-90 ...	521,224	815
„ 1888-89 ...	520,803	815

There was a nominal increase of 423 acres in the leased forests owing to the recalculation of the area of Raiengarh, while in Saháranpur a grant of two acres of reserved forest was made to a fakír at Barkala. The total in square miles remained the same (under the rule regarding fractions).

It has been proposed* to reserve the Malkot forests, Dehra Dún district, approximate area 4,437 acres. The forest settlement was in progress at the close of the year, and the final notification should issue by February 1891.

3. The demarcation of the forests may be described as follows :—

Division.	Pillars.	Boundary lines.	Cost of maintenance.	Pillars requiring repairs at the close of the year.
	Number.	Miles.	Rs.	
Dehra Dún	1,028	221	278	554
Saháranpur	486	132	458	62
Jaunsár	2,044	448	597	458
Total ...	3,558	801	1,333	1,074

* G. O. No. $\frac{936F.}{464.-8}$, dated 11th December 1889.

Save in cases where the boundary is under dispute measures have been taken to repair the damaged pillars.

The charges for maintenance include charges for the substitution in Jaunsár of permanent masonry for dry stone masonry pillars. The orders regarding the inspection of boundaries were duly observed.

4. The following boundary disputes are still under settlement :—

Sahâranpur.—With the Powell Estate in the western range. Proposals for settlement, accepted by the landholders and by the Forest Department, are now before the Settlement Officer.

Jaunsár.—(i) The Deogárh boundary with Jubal and Taroch is still under consideration by the Superintendent Hill States, Simla. Field work disposed of. The whole of this boundary, which as regards demarcation is in a most unsatisfactory condition, has recently been specially reported on by the Superintendent, Dehra Dún.

(ii) Dádi leased forest with Taroch. Field work completed. Case with Superintendent Hill States.

(iii) Tehri-Garhwal. Present boundary declared correct by Superintendent, Dehra Dún.

CHAPTER II.

Surveys, Working Plans, Annual Programmes of Work.

1.—Surveys.

5. In Jaunsár the survey of the Tehri-Garhwál leased forests was in progress during the year. It is understood the field work has been completed at a cost of Rs. 1,551, but the amount of the debit has not yet been finally settled. Rs. 164 were expended in petty local surveys and mapping.

2.—Working Plans.

6. No new plans are in hand, and there was no expenditure under this head.

Existing Working Plans.

Dehra Dún.—The provisions of the working plan will be fully carried out by the close of the working season (30th June), and only two minor works were uncompleted at the close of the year.

Jaunsár.—The following plans are in force :—

i. Deoban range.
ii. Tehri-Garhwál deodár forests.
iii. Jaunsár chír forests (sanctioned* at close of year).

In Deoban there were nominal deviations from the plan :—

(a) *Korwa coppice compartment.*— Not cut over, as there was no demand for the outturn.
(b) *Kálsi coppice.*—Five acres instead of 54 acres sold owing to short demand.
(c) *Plantation work at Korwa, 22 acres.*—Work deferred, as no seed was available
(d) *Plantation work at Bodiár*—Ten instead of 20 acres dealt with, as seed was not available.
(e) *Under thinning.*—Thirty-four acres were thinned in excess of the programme, while in Karamba the girdling operation (area not specified) was deferred owing to pressure of other work.
(f) The closure scheme at Kálsi was in part deferred (as the cutting has been postponed owing to short demand), and only 100 acres instead of 270 acres have been closed.

In the Tehri-Garhwál deodár forests, the fellings at Deota are one year behind the plan, as it has been found that the area assigned for the past year yielded more trees than was estimated. One hundred and seventy-seven deodár trees were, under special sanction, felled in excess of the regulated number of 2,000 trees.

The girdling and thinning operations, which were in arrears, have been nearly brought to up date, while 71 acres instead of 40 acres were planted up.

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* G. O. No $\frac{3F}{903-8}$, dated 4th January 1890.

The Jaunsár chír forest plan was sanctioned too late in the year for introduction in its entirety, but its provisions were generally observed as to felling and fire protection, while the demarcation and proposed exchanges in village lands have been put in hand.

3.—Annual Programmes of Work.

7. The programmes of works have been generally carried out in all divisions, and there were no serious deviations from the sanctioned schemes.

CHAPTER III.

Protection and Improvement.

1.—Establishment.

8. The charge of the circle was held by—

Lieutenant-Colonel F. Bailey, R.E.	1st April to 10th June 1889.
Mr. E. McA. Moir	11th June 1889 to 22nd August 1889.
Lieutenant-Colonel F. Bailey, R.E.	22nd August 1889 to 23rd August 1889.
„ „ G. J. Van Someren, B.S.C. ...	24th August 1889 to 23rd November 1889.
„ „ F. Bailey, R.E.	24th November 1889 to 23rd March 1890.
Mr. C. Bagshawe	24th March 1890 to 31st March 1891.

9. The charges of the divisions varied as follows :—

Dehra Dún.

Mr. A. Smythies, Officiating Deputy Conservator, 3rd grade ...	1st April to 14th June 1889.
„ L. Mercer, ditto, 4th „ ...	15th June to 1st July 1889.
„ A. Smythies, ditto, 3rd „ ...	2nd July to 25th November 1889.
„ L. Mercer, ditto, 4th „ ...	26th November to 31st March 1890.

Saháranpur.

Mr. L. Mercer, Officiating Deputy Conservator, 4th grade ...	1st April 1889 to 2nd January 1890.
„ B. B. Osmaston, Officiating Assistant Conservator, 1st grade	3rd January to 31st March 1890.

Jaunsár.

Mr. E. McA. Moir, Officiating Deputy Conservator, 2nd grade ...	1st April 1889 to 31st March 1890.

Mr. B. B. Osmaston, Assistant Conservator, was employed in the Jaunsár and Ganges Division from April to June; he was attached to the Direction Division for employ in the Forest School, July to October, and was again in Jaunsár during November and December.

10. The grants for the Executive, Protective and Office Establishments were distributed and utilized as follows :—

Division.	Executive and protective establishment.							Office establishment.						
	Permanent sanction per annum.	Temporary sanction per annum.	Total sanction as it stood on 31st March 1890.	Actual charges.				Permanent sanction per annum.	Temporary sanction per annum.	Total sanction as it stood on 31st March 1890.	Actual charges.			
				1888-89.		1889-90.					1888-89.		1889-90.	
	Rs.	Rs.	Rs.	No	Rs.	No	Rs	Rs.	Rs.	Rs.	No.	Rs.	No.	Rs.
Direction ...	...	...	...	...	...	...	...	2,724	1,088	3,812	17	3,022	17	3,705
Dehra Dún ...	8,092	664	9,356	65	8,874	65	9,110	2,160	672	2,832	15	2,559	21	2,626
Saháranpur...	6,472	6	6,478	56	6,039	58	6,342	1,416	272	1,688	10	1,587	12	1,679
Jaunsár ...	7,128	1,250	8,378	48	8,054	50	7,764	2,112	369	2,481	15	2,691	15	2,372
Unallotted ...	2,536	...	2,536	...	...	...	...	70	...	70	..	...	...	...
Total ...	24,828	1,920	26,748	170	22,907	173	23,216	8,482	2,401	10,883	57	10,709	64	10,382

The savings were on account of portions of the grant being kept in hand until the full establishment of Rangers is employed, and also to savings on leave allowances.

11. The circle is divided into the following executive charges :—

Divisions.	Area	Number of ranges.	Average area per forest range.
	Sq M.		
Dehra Dún	289	7	41
Saháranpur	295	3	98
Jaunsár	231	5	46

The number of ranges was increased by one, owing to the formation of the Tirsál range in the eastern Dehra Dún.

The Jumna river range in Jaunsár is still attached to the Deoban range, which is objectionable as it involves the nominal charge by one ranger of about 74 square miles of forest and 120 miles of river, so that thorough supervision is nearly impossible. The receipts, Rs. 21,892, and expenditure, Rs. 3,655, of the river range justify its constitution as a separate charge.

The fifteen range charges were held as follows :—

	Rs.	No. of ranges.
Forest Ranger, 3rd grade	100	... 1
Ditto, 4th „	80	.. 2
Ditto, 5th „	60	... 1
Ditto, 6th „	50	... 3
Forester, 1st „	40	... 2
Ditto, 3rd „	30	... 3
Ditto, 5th „	20	... 2
Ditto, 6th „	15	... 1

The sanctioned staff of forest rangers is—

2nd grade	120	... 1
3rd „	100	... 1
4th „	80	... 2
5th „	60	... 3
6th „	50	... 5
Total		... 12

Of the present staff of range officers two men have obtained the ranger's certificate with honours, two the ranger's ordinary certificate and eight the forester's certificate. Two other men who have obtained the forester's certificate are employed on special duty. One probationer, Gulab Rae, obtained a ranger's certificate in March 1890. There are two probationers at the school.

12. With regard to the *personnel* of the executive staff, in the Dehra Dún Division the range officers are well reported on, and Har Sarup, I, merits special commendation.

In Saháranpur the work done by Rangers is fairly commended, the services of Mukandi Lal being specially noticed.

In Jaunsár the range officers are highly spoken of, and Sadanand, Keshavanand and Rama Datt merit warm praise.

13. The protective establishment is, on the whole, well manned. In Dehra Dún the Deputy Conservator reports well of his men. In Saháranpur the reports are equally good. In Jaunsár the report is not so favourable: two forest guards were convicted of taking bribes and one was dismissed on a similar charge, one man was reduced for careless work and several were fined for overstaying leave. There are, however, some excellent forest guards in the division.

14. The office establishment is well reported on, but, as is general throughout the province, it is represented to be overworked and underpaid. References on the subject of forest office work now before Government fully explain the difficulties which exist, and I trust some changes may soon be made.

2.—General Protection and Breaches of Forest Law.

15. The following is a comparative statement of forest offences :—

Division.	Year.	Cases before criminal courts, including pending from previous years.	Prosecutions. Conviction. Number of cases.	Prosecutions. Conviction. Number of persons.	Prosecutions. Acquittals. Number of cases.	Prosecutions. Acquittals. Number of persons.	Cases pending. Number of cases.	Cases pending. Number of persons	Remarks.	Cases compounded by Divisional officers under section 67 of the Indian Forest Act. Number of cases.	Number of persons.	Amount of compensation.
												Rs.
Dehra Dún ...	1888-89,	2	1	1	1	2	...	...	The cases were tried in the District Courts.	23	63	144
	1889-90,	...	...	...	...	...	...	...		17	50	166
Saháranpur ...	1888-89,	1	...	...	1	1	...	...		31	91	434
	1889-90,	4	4	15	...	1	...	...		31	101	379
Jaunsár ...	1888-89,	7	6	11	1	1	...	...		21	44	230
	1889-90,	6	6	8	...	1	..	...		50	98	456
Total for Circle,	1888-89,	10	7	12	3	4	...	...		75	198	808
	1889-90,	10	10	23	...	2	...	...		98	249	1,001

The classification of all cases compares as follows :—

	1888-89.	1889-90.
i.—Incendiary fires	12	15
ii.—Misappropriation of produce	42	55
iii.—Illicit grazing	20	23
iv.—Other offences	11	15
Total ...	85	108

General protection is well reported on, and recent inspections of the forests bear this report out. Particular success was attained in prosecutions for incendiarism in Saháranpur, and to this fact the improved result of fire conservancy operations this season is attributable.

The increase of cases is mainly in Jaunsár and occurs under all heads. Mr. Moir, while noting the generally law abiding nature of the Jaunsáris, attributes this increase to extra zeal in the management of this widely distributed charge.

The relations between the forest subordinates and their village neighbours continue satisfactory, and the check over the exercise of rights and privileges seems sufficient.

The restrictions imposed on lopping trees in Jaunsár, referred to last year, work well.

3.—Fire Conservancy.

16. This subject will be dealt with in Appendix I.

4.—Grazing.

17. The areas open and closed to grazing compare as follows :—

Division.			Total area.	Area closed to grazing.	Percentage of total area closed.
Dehra Dun			185,270	43,363	23·40
Saháranpur			188,564	63,359	33·60
Jaunsar			147,390	44,757	30 30
Total for the Circle	1889-90		521,224	151,479	29·0
	1888-89		520,803	151,143	28·21

The increase in the area closed is in the Jaunsár Division, where certain areas to be worked as coppice have recently been closed by the Superintendent of the Dehra Dún.

Information as to the actual head of cattle grazing in the open forests of the whole circle is not available, but it is noted that in Saháranpur, by far the most heavily grazed division, the grazing area per head stood as follows :—

	Acres per head.	Head of cattle.
1888-89	1·76	70,704
1889-90	1·56	73,805

It is generally noted that the grazing as now regulated does little damage to valuable forests. Save in the Saháranpur Division the arrangements as to the admission of Gujars' buffaloes work well, and the limited head now admitted proves useful.

In Saháranpur it will be well to still further reduce the head of Gujars admitted.

18. *Grazing dues.*—The past and present receipts on this account compare as follows :—

	Rs.	Receipts per acre.	Outstanding on 31st March. Rs a. p.
1888-89	28,664	1 24 annas	81 7 0
1889-90	27,782	1·2 „	29 0 0

The new orders regarding the collection of grazing dues in Saháranpur are working smoothly, and they are in course of introduction in Dehra Dún.

5.—Natural Reproduction.

19. The sál has seeded generally and in abundance in the Dehra Dún and fairly in Saháranpur. In Jaunsár few deodárs seeded, and the blue pine, spruce and silver firs may be said to have borne no seed. In Dehra Dún Mr. Mercer notes that in all thinned areas the reproduction is excellent, and that save in the tracts heavily grazed (which are not extensive) it is generally satisfactory. Mr. Osmaston in Saháranpur notes that in the closed or lightly grazed areas, particularly in the Central and Eastern ranges, reproduction is good, and that sál, chír and shisham are specially doing well.

Mr. Moir notes that in Jaunsár the eminently satisfactory results of protection become yearly more noticeable except in forests at high altitudes, where reproduction and growth are alike tardy. To a Forest Officer returning to this district after the lapse of many years the change in the forests in Jaunsár is most noticeable. Taking the deodár and blue pine zone in Jaunsár, in Báwar and in the leased tracts, the condition of the forest growth is all that can be wished for; in the chír forests protected from fire the reproduction is also good, and it is only in the forests of oak, spruce and silver fir in the upper hills that progress is hardly observable; even in these tracts, however, the kharsu oak and silver fir are doing well under favourable circumstances. In the sál forests of the Dún wherever the improvement fellings have been made and grazing is light the condition of the forests is excellent, and it is notable that in the tracts where Mr. Greig first started the improvement fellings, which were afterwards characterized as bold to rashness and more or less a failure, the results, as far as the advance growth is concerned, will now compare with the growth in any part of these forests.

6.—Artificial Reproduction.

20. The work and expenditure under this head compares as follows :—

	Expenditure.		Added area.	
	1888-89.	1889-90.	1888-89.	1889-90.
	Rs.	Rs.	Acres.	Acres.
Dehra Dún	531	177	¼	...
Saháranpur	156	97	2¼	¼
Jaunsár	1,048	1,418	47	151

Total Capital Charge.

In Dehra Dún Rs. 6,365 have been spent on plantations or Rs. 69 per acre; in Saháranpur Rs. 5,657 have been spent or Rs. 45 per acre. The results as a whole are not successful, and the work has very rightly been nearly stopped.

In Jaunsár the total cost of planting work has been Rs. 25,843 on 1,726 acres or Rs. 15 per acre, 337 acres being in the leased forests. The results are better in Jaunsár than in the plains, and it may be said that half the area is well stocked. As a rule areas are dealt with that for many years will not be stocked by nature or which are stocked with inferior species. Even in Jaunsár the work may with advantage be curtailed, as it is an undoubted fact that for every tree felled in the last 20 years many thousand trees have been added to the forests, thanks to protection from adverse influences and the active aid afforded by intelligent management. It therefore seems doubtful if it is the duty of Government to provide the fifth generation with a limited number of deodár at say Rs. 25 per tree while it is at present not realizing that sum for the trees sold and the supply is in excess of the demand.

Work in the Chakráta Forest Garden was confined to the cultivation of fruit trees and a few vegetables. The expenditure amounted to Rs. 512; the receipts to Rs. 159.

This garden should soon pay the charges and also be a boon to the cantonment.

7.—Climber cutting and removal of inferior species.

21. The following work was done :—

Climber cutting.

	Area.		Cost.	
	1889-90.	1888-89.	1889-90.	1888-89.
	Acres.	Acres.	Rs.	Rs.
Dehra Dún	9,738	6,972	861	640
Saháranpur	798	670	59	36
Jaunsár	...	640	...	57
	Square miles.	Square miles.	Cost per square mile.	
			Rs.	Rs.
Whole Circle	16½	13	56	56

Cutting back badly grown and damaged sál, &c.

	Area.		Cost.	
	1889-90.	1888-89.	1889-90.	1888-89.
	Acres.	Acres.	Rs.	Rs.
Dehra Dún Division	1,200	1,450	798	1,088

The area and cost must vary from year to year. The area prescribed by the working plan has been cut over and the work was well done.

Girdling and thinning.

	Area.		Cost.	
	1889-90.	1888-89.	1889-90.	1888-89.
	Acres.	Acres.	Rs.	Rs.
Dehra Dún	6,550	4,160	1,132	1,455
Jaunsár	2,020	1,848	1,149	917

These operations are also ruled by the working plan. In Dehra Dún the work seemed well done. In Jaunsár the work has not generally been done with care, and there has been too little supervision by the range officers. Mr. Moir notes that this is due to press of work, and the question is receiving attention.

Progress of coppice growth.—All the areas managed as coppice (simple or with standards) are doing well. The new area at Gidhi in the Deoban working circle has been taken up this year and the cutting was very well done. It is proposed to abandon the Badsháhibágh coppice in Saháranpur owing to its inaccessibility.

8.—Roads and Buildings.

22. The main work of the year was in Jaunsár, where the Thadiar sledge road, 1½ miles long, was built at a cost of Rs. 4,843 to replace the sleeper slide which was swept away by an abnormal flood and extensive landslips in August 1889. The slide had been in existence for 13 years, and its loss within two years of the closure of the Deota works was a great misfortune. The other works were of an ordinary character and call for no special comment.

The expenditure is grouped as follows :—

Year.	Roads.	Buildings.	Other works.	Total.
	Rs.	Rs.	Rs.	Rs.
1889-90	10,170	7,899	505	18,574
1888-89	6,629	13,728	198	20,555
1889-90 { Increase	3,541	...	307	...
{ Decrease	...	5,829	...	1,981

The capital and maintenance charges compare as follows :—

Roads.

	1889-90.	1888-89.
	Rs.	Rs.
Capital expenditure	5,572	1,146
Maintenance	4,598	5,483
	10,170	6,629

Increase due to the construction of the sledge road.

Buildings.

	1889-90.	1888-89.
	Rs.	Rs.
Capital expenditure	2,794	9,351
Maintenance	5,105	4,377
Total ...	7,899	13,728

The decrease is due to the completion of most of the main rest houses required. The capital expenditure was divided as follows :—

	1889-90.	1888-89.
	Rs.	Rs.
Rest houses for controlling staff	368	6,547
Quarters for executive staff	908	654
Ditto protective and revenue staff	1,518	2,150
Total ...	2,704	9,351

Headquarters buildings for all ranges are now completed, but a good deal of work has to be carried out in providing the forest guards with quarters.

Other works.

	1889-90.	1888-89.
	Rs.	Rs
Capital expenditure	...	...
Maintenance and petty charges	505	198

The above includes clearing wells, compounds, &c., and the charges vary from year to year.

Roads.

23. The roads in the circle are classed as follows :—

Description of road.	Length of miles of road in each division.			Total miles of road in circle.	
	Dehra Dún	Saháran-pur.	Jaunsár.	1889-90.	1888-89.
Cart roads, 10 to 20 feet wide	263	92	1	356	315
Bridle roads, 6 feet	14	10	128	152	178
Inspection, fire line and carrying paths ...	26	1	354	381	363
Total ... { 1889-90	303	103	483	889	...
{ 1888-89	284	99	473	...	856
Increase in year ...	19	4	10	33	...

The number of bridges maintained is not given, as there are discrepancies in the returns which must be reconciled before the figures can be quoted, and indeed the entry of the information in this report seems superfluous.

24. *Dehra Dún Division.*—The original works are 3 miles 42 chains of cart road and 42 chains of inspection path, cost Rs. 314. Maintenance, 299 miles of road and path were repaired for Rs. 2,073.

25. *Sahâranpur Division.*—No original work was done, but parts of the Hardwâr-Khara and of the Raighati roads were straightened and improved, and Rs. 190 spent on Salomkhala bridge on the former. The total charge on 103 miles was only Rs. 258.

26. *Jaunsâr Division.*

Construction.

	M.	ch.		
The Thadiar sleeper sledge road	1	20	4,843	
Dâghpathar depôt road			315	
Sansog Dâdi path	2	27	100	
				5,258

Maintenance.

Repairs to roads		2,268

The sledge road is a most admirable piece of work, and it is a great success both from a financial and engineering point of view. A special report is being submitted in connection with this work. The repairs of roads cost Rs. 932 less than last year owing to the savings made to provide the sledge road grant.

27. The following buildings were constructed or maintained during the year :—

Division.	Rest houses for controlling staff.		Quarters for subordinates (excluding revenue depôts).		Offices, stores, revenue depôts, &c.		Wells.		Total.	
	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.
Direction	...	...	12	12	5	5	...	...	17	17
Dehra Dún	31	30	73	69	3	3	2	2	109	104
Sahâranpur	4	3	29	28	1	2	6	6	40	39
Jaunsâr	17	16	65	61	18	18	...	...	100	95
Total for circle ...	52	49	179	170	27	28	8	8	266	255

Three rest houses and nine range and forest guards' headquarters were constructed and one store building was abandoned.

28. *Direction Division.*—Maintenance charges on 17 buildings, Rs. 437 : of this Rs. 378 was spent on the forest school buildings. Besides this a special grant of Rs. 19,637 was sanctioned for the repairs of the main building of the school, and Rs. 13,701 for a new museum and a lecture room.

29. *Dehra Dún Division.*

Construction.

	Rs.
Rampur Mandi rest house restored	300
Four new quarters for rangers and guards	304
	604

Maintenance.

Repairs to 104 old buildings	1,495

The buildings are all in good order.

30. *Saháranpur Division.*

Construction.

	Rs.
Kasumri rest house (total charge Rs. 920)	109
Temporary rest house at Barkala and outhouses at Mohand and Dholkhand ..	75
Rangers' quarters at Dholkhand	282
Forest guards' quarters	265
	731

Maintenance.

Repairs to 38 buildings	418

The buildings are all reported to be in good order save Beribara, which is to be thoroughly repaired in 1890.

31. *Jaunsár Division.*

Construction.

	Rs.
Dhárágádh rest house	164
Tiuni range quarters	326
Maijani ditto	330
Bogriwála river depôt	257
Lokandi boat quarter	81
Total ...	1,158

Maintenance.

	Rs.
Repairs to 95 buildings	3,056

The buildings are in capital repair.

CHAPTER IV.

Yield and Working.

32. The yield and the results of the work of the year as compared with that of 1888-89 may be summarized as follows :—

		1888-89.	1889-90	Increase.	Decrease.
1	Yield of timber and fuel ... ... c ft.	3,341,214	3,646,978	305,764	...
2	Value of above ... ... Rs.	4,19,030	4,54,060	35,030	...
3	Yield of timber ... . c. ft	783,413	849,472	66,059	...
4	Value of above ... ... Rs.	3,25,422	345,572	20,150	..
5	Yield of timber removed by departmental agency and purchasers ... . c. ft.	6,84,737	735,741	51,004	...
6	Value of above ... . Rs.	3,17,522	3,35,606	18,084	...
7	Yield of timber removed by grantees and right holders ... ... c. ft	98,676	113,731	15,055	...
8	Value of above ... . Rs.	7,900	9,966	2,066	...
9	Yield of firewood and charcoal .. ... c. ft.	2,557,801	2,797,506	239,705	...
10	Value of above ... ... Rs	93,608	1,08,488	14,880	..
11	Yield of fuel removed by departmental agency ... c. ft	427,379	5,61,007	133,628	...
12	Value of above ... ... Rs.	31,524	45,947	14,423	...
13	Yield of fuel removed by purchasers... ... c. ft.	461,574	534,375	72,801	...
14	Value of above ... . Rs.	11,554	11,917	363	...
15	Yield of fuel removed by grantees and right holders. ... ... c ft	1,668,848	1,702,124	33,276	...
16	Value of above ... ... Rs	50,530	50,624	94	...
17	Timber sold by departmental agency .. ... c ft.	220,608	254,735	34,127	
18	Receipts on above . . .. Rs.	2,14,205	2,10,997		3,208
19	Timber sold direct to purchasers ... ... c ft.	427,558	445,009	17,451	...
20	Receipts on above ... . Rs.	79,777	80,485	708	...
21	Fuel sold by departmental agency .... c. ft.	469,304	508,181	38,877	...
22	Receipts on above ... ... Rs	45,434	37,379	..	8,055
23	Fuel sold direct to purchasers ... ... c. ft	461,574	534,375	72,801	...
24	Receipts from above . ... Rs	11,554	11,917	363	...
25	Bamboos sold... ... ...score.	96,841	130,885	34,044	...
26	Value of above .. .. Rs.	12,338	16,708	4,370	. .
27	Minor produce and grazing ... ... ,,	50,645	52,518	1,873	...
28	Value of other receipts ... ... ,,	15,990	26,800	10,810	
29	Yield of timber and fuel per square mile ... c. ft.	4,099	4,475	376	...
30	Value of above per square mile ... ... Rs.	514	557	43	.
31	Gross cash receipts per square mile ... ... ,,	479	531	52	...
32	Net ditto ditto ... ... ,,	151	198	47	...

Code forms 53 to 57 supply detailed information regarding the yield, and comparative abstracts for the circle showing the number of trees felled, the outturn of all

kinds of produce and the disposal of produce in Government sale depôts have been attached to code forms 53, 54, 55 and 56.

The felling operations of the year compare as follows with those of 1888-89 :—

Description of felling.	1888-89.		1889-90.		Increase.		Decrease.	
	No. of trees.	Cubic feet.	No. of trees.	Cubic feet.	No. of trees	Cubic feet.	No. of trees.	Cubic feet.
Selection ...	11,491	813,291	10,990	955,138	...	141,847	501	...
Thinning ...	215,347	476,138	273,547	535,201	58,200	59,063	...	...
Clearance ...	20,053	59,829	9,971	50,605	...	...	10,082	9,224
Total ...	246,891	1,349,258	294,508	1540,944	58,200	200,910	10,583	9,224

In Dehra Dún the yield of selection fellings was reduced by 7,734 cubic feet, and the yield of thinnings (which include improvement fellings) increased by 66,505 cubic feet under the provisions of the working plan and thanks to an increasing demand for timber which has coincided with a reduction in departmental works. In Saháranpur selection fellings and clearances yielded 570 cubic feet and 3,450 cubic feet in excess of last year, and thinnings less by 11,910 cubic feet. This latter item includes the coppice work, and it is noted that the areas cut were poorly stocked.

The Jaunsár selection fellings and thinnings increased respectively by 149,011 cubic feet and 2,468 cubic feet owing to extended operations, while clearances, a variable item, fell off by 12,692 cubic feet.

The removal by Government agency and by purchasers during the year under review and 1888-89 are thus contrasted :—

Description of produce and year.	In cubic feet or rupees.							
	Class.				By whom removed.			
	Total outturn.	Selection fellings	Clearances	Thinnings.	Government agency.	Purchasers.	Free grants.	Right holders.
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Timber in cubic feet. 1888-89 ...	783,413	562,816	12,421	208,174	257,149	427,588	3,321	95,355
Timber in cubic feet. 1889-90 ...	849,472	601,795	18,701	228,976	290,732	445,009	2,171	111,560
Fuel in cubic feet. 1888-89 ..	2,557,801	125,051	2,150,720	282,030	344,429	544,524	...	1,668,848
Fuel in cubic feet. 1889 90 ..	2,797,500	179,078	2,254,073	363,455	561,007	534,375	7,500	1,694,624
	Rs.				Rs.	Rs.	Rs.	Rs.
Minor produce in rupees. 1888-89 ..	62,083	...	...	...	945	53,700	...	8,338
Minor produce in rupees. 1889-90 ...	60,226	...	...	...	2,100	58,028	151	8,347

It will be noted that the timber and fuel sold by Government agency realized Rs. 3,208 and Rs. 8,055 less, though the quantity was greater. This is attributed to a fall in prices ; the cost of production, however, also fell.

Departmental operations for the present and past years contrast financially as follows :—

Year.	Amount of revenue.			Cost to Forest Department.			Surplus.
	Due.	Received.	Outstanding.	Timber expenses, A. I., &c.	Quota of other charges	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.
Average of last eight years	1,39,719	1,39,069	650	82,085	9,854	91,939	47,780
1888-89	2,47,370	2,33,591	13,779	1,19,486	12,371	1,31,857	1,15,513
1889-90	2,42,880	2,41,086	1,794	1,15,286	13,125	1,28,361	1,14,519

Dehra Dún shows increased removals of produce by Government agency owing to the export of the collections of the previous years. On the other hand, the system of sales to purchasers has been extended in 1889-90 (*vide* the return of trees felled), and departmental works, which last year dealt with 39 per cent. of the outturn in cubic feet of timber and fuel that is sold, this year dealt with less than 17 per cent.

In Saháranpur the outturn by Government agency has decreased as the coppice cutting has been given out to purchasers who now remove over 7½ per cent. of the exports of timber and fuel.

In Jaunsár the export of timber and fuel by Government agency has increased by 69,878 cubic feet opposed to an increase of 23,778 cubic feet by purchasers, and of the total outturn sold 61 per cent is removed by the department. There is no doubt that the position in Jaunsár is exceptional, and that under Mr. Moir's careful management departmental works pay better than direct export. As a case in point the dry deodár sleepers from Mundali may be referred to, where without extra establishment or roads the departmental profit was double what would have been obtained from any contractor.

The yield of the circle in produce sold has increased under the main items as follows :—

	Cubic feet.	Rs.
Timber	51,004	18,084
Fuel	206,429	14,786
Bamboos (scores)	34,044	4,370
Minor produce and other receipts		12,683

The increase is general through all the divisions and is due to the exceptionally good demand for all kinds of forest produce, while the increase of 11 per cent. in the gross receipts per square mile, giving an increase of 31 per cent. in the net receipts, may fairly be attributed to careful management.

The variation in removals by grantees and right holders is insignificant and calls for no explanation.

Dehra Dun Division.

33. The yield of timber and fuel was obtained as follows :—

	C. ft.		C. ft.
Selection fellings	1,452	decrease	2,404
Clearances	734,781	increase	95,607
Thinnings	436,061	do.	94,849
The timber was removed—			
by Government agency	46,360	decrease	8,313
by purchasers	187,589	increase	11,361
by free grants	...	decrease	969
The fuel was removed—			
by Government agency	315,990	increase	135,916
by purchasers	382,965	do.	155
as free grants	...	do.	7,500
by right holders	2,31,984	do.	25,776

Under other heads we note—

	Rs.		Rs.
The Ganges drift wood realized	6,858	decrease	481
	No.		No.
Bamboos sold amounted to	979,680	increase	217,080
	Rs.		Rs.
Ditto realized...	6,584		1,203
Grass and grazing realized	7,142	decrease	248
Minor produce and other receipts	8,162	increase	1,294

The net revenue was Rs. 59,433 or Rs. 206 per square mile; increase Rs. 13,580 or Rs. 47 per square mile.

The selection fellings are for special works, and the ordinary operations of the working plan fall under the other two heads.

The decrease in departmental timber operations in this division is due to a reduction of work under the contract with the Irrigation Department for the Hardwár dam timber ($\frac{1888\text{-}89}{\text{Rs. } 13{,}706}$ $\frac{1889\text{-}90}{\text{Rs. } 1{,}373}$), a demand it was found impossible to meet at the old rates, and which it therefore seemed better to leave to private enterprise. The departmental fuel supply was from the fellings and from the drift operations to meet a contract with the Roorkee Workshops, any timber outturn being sold at the periodic sales at Lalta Rao on the Ganges (2,315 pieces = Rs. 2,109). The Ganges drift operations (131,455 cubic feet against 106,398 last year) were slightly less remunerative than in 1888-89.

The sales to purchasers show a steady increase, and the Dún works are very popular. The rise in the amount of the direct export of nearly every description of produce is very satisfactory, as is the improving demand by purchasers, which has enabled us to work nearly up to the provisions of the working plan and thus afford the forests the best chance of improvement.

Offering increased amounts of timber and fuel for sale has only lowered prices to a moderate extent (timber from Rs. 352 to Rs. 283 and fuel Rs. 25 to Rs. 24 per 1,000 cubic feet), and it is hoped the demand will continue and prices rise.

Under the working plan 183,517 trees have been marked for 1890-91, opposed to 109,539 trees marked for 1889-90. The outturn will be about the same.

The exports from Government and private forests in the Dehra Dún down the Ganges river are reported as follows :—

Produce.	Government forests.		Private forests.	
	1888-89.	1889-90.	1888-89.	1889-90.
Timber (pieces)	9,466	12,986	22,318	50,111
Fuel (maunds)	22,378	28,162	960	3,270
Bamboos (scores)	7,938	10,377	350	22,706

Saharanpur Division.

34. The yield of timber and fuel was obtained as follows :—

	C. ft.		C. ft.
Selection fellings	636	increase	570
Clearances	23,450	do.	3,450
Thinnings	153,822	do.	4,890
The timber was removed by—			
Government agency	1,810	decrease	27
Purchasers	2,512	increase	333
Free grantees	931	do.	779
The fuel was removed by—			
Government agency	43,050	decrease	46,900
Purchasers	129,605	increase	54,725
Under other heads we note—			
	No.		No.
Bamboos sold amounted to	1598,900	do	495,810
	Rs		Rs.
Ditto realized	10,004	do.	3,104
Grass and grazing realized	18,459	decrease	1,438
Minor produce and other receipts	10,697	do.	62

The net revenue was Rs. 24,722 or Rs. 84 per square mile, increase Rs. 3,211 or Rs. 12 per square mile.

The increase under selection fellings is due to the area felled giving finer trees than last year's area : the slight increase under the other heads is due to poorly stocked areas

having been coppiced. The decrease in Government fuel works and increase in purchasers' fuel is due to the Tira coppice having been transferred to a purchaser.

The increase in bamboos is due to an exceptionally brisk demand. The general results of the year are satisfactory.

Jaunsár Division.

35. The yield of timber and fuel was obtained as follows:—

	C. ft.		C. ft.
Selection fellings	779,085	increase	95,738
Clearances	1,514,543	do.	10,576
Thinnings	2,548	do.	2,488
The timber was removed by—			
Government agency	242,556	do.	25,267
Purchaser	254 908	do.	5,757
Free grantees	1,240	decrease	960
Right holders	111,500	increase	16,205
The fuel was removed by—			
Government agency	201,967	do.	44,612
Purchasers	21,905	do.	17,021
Right holders	1,402,640	do.	...
Under other heads we note—			
	Rs.		Rs.
Drift wood realized	797	do.	711
	No.		No.
Bamboos and ringals sold amounted to	28,250	decrease	42,820
	Rs.		Rs.
Ditto ditto realized	46	do.	10
Grass and grazing realized	2,181	increase	708
Jumna river dues	18 747	do.	4,970
Rosin and similar products	2,856	do.	1,922
Other minor products and receipts	1,355	do.	675

The net revenue was Rs. 1,13,979, equal to Rs. 493 per square mile, giving an increase of Rs. 36,569 or Rs. 158 per square mile over 1888-89.

The fellings, which are within the regulated quantities, have increased in consequence of extended sleeper and commissariat fuel operations, while the demand by purchasers has also risen.

The number of trees cut is less, owing to a smaller area of coppice having been cut this year. It may be noted that the trees entered in form 53 had much better not include poles.

The new kharsu oak coppice at Gidhi near Deoban was worked for the first time; area 2½ acres, standards left 30 per acre, outturn 9,700 cubic feet or double the estimate of the working plan. At Kálsi five acres of sál and other species coppice were sold for Rs. 420: no other coppice was worked.

The departmental operations compare as follows:—

	1888-89.		1889-90.	
	Quantity. C. ft.	Rs.	Quantity. C. ft.	Rs.
Timber	217,289	1,83,193	242,556	2,08,707
Fuel	157,355	33,733	201,967	27,484
Other items		945	...	2,095
Total departmental sales	...	2,16,871		2,38,286
Total receipt of division	...	2,48,595		2,81,413

figures which show how largely the division is worked departmentally.

The chief departmental works of the year were—

i.—Sawing and carrying 21,022 deodár and fir scantlings for the Chakráta Depôt.

ii. Cutting and carrying 114,260 cubic feet fuel for the supply of Chakráta.

iii.—Sawing and carrying in hills 119,472 deodár metre gauge sleepers at Deota and Mundali.

iv.—Floating to and delivering at Delhi 100,300 deodár metre gauge sleepers.

v.—Preparing and selling 19,534 chír scantlings at Daghpathar and in the forests.

The destruction in August 1889 of the Thadiar wet slide, just as it had been put in thorough repair and had electric bells put up to facilitate working, was a great disaster; but by December 1889, the slide was replaced by a sledge road and the contracts of the year were punctually carried out.

The change in mode of export involved a temporary increase of one anna in the carrying charge per sleeper; but as a set off the sledge road can be worked at all seasons, while the slide only worked in the rains.

In the Mundali works the Dhárágádh (which is only a small hill stream) was successfully used for export by the adoption of the Mundi telescopic system of transporting sleepers with the aid of water. The dams and escapes worked capitally.

The exports of Government and other produce *viâ* the Jumna compare as follows with those of previous years :—

Description.	Government departmental timber.	Government timber removed by purchasers	Timber from private forests	Total.
	Number of pieces.	Number of pieces.	Number of pieces	Number of pieces.
Deodár sleepers	112,573	16,893	311,427	440,893
Chír scantlings	6,030	94,493	152,512	253,035
Sál, &c.	7	57,364	62,187	119,558
Total ... 1889-90 ...	118,610	168,750	526,126	813,486
Total ... 1888-89 ...	102,015	120,038	384,573	606,626

The Jumna river dues were Rs. 18,717 against Rs. 13,795 in 1888-89.

Export by purchasers.—As will be seen, there was an increased demand for timber and fuel. The sale of chír trees was brisk, and better prices were obtained.

The increased grazing dues are chiefly from Gujars.

Resin works near Katian-Bawar Range.—For a detailed description see para. 68 of the 1888-89 report.

During the past year the work was carried on as follows :—

	No.	Seers.
Trees tapped, kail	1,973	yield 2½ per tree.
Ditto chír	3,215	do. 6 ditto.

Outturn, 1st April to 1st December, crude resin, 604 maunds.

The tapping has not yet affected the trees, and it is proposed to continue the operation for four years if profitable. Distillation was carried on at Deoban (July to December, wood being used for fuel, which damaged the still).

	Mds.
Amount of crude resin distilled	312
Outturn—Colophony	200
Turpentine	42
Waste products	70
giving per maund of crude resin—	Srs.
Colophony	26
Turpentine	5
Waste products	9

The cost of the produce per maund is returned as—

	Rs. a p
Collecting and carrying 22 miles in hills to Deoban	2 14 1
Cost of distillation, excluding capital cost of still, &c.	1 1 11
Total ...	4 0 0

Part of the produce was sold as follows:—

Colophony . ... 197 maunds @ Rs. 4-8-0 per maund.
Turpentine ... ... 18½ ditto @ „ 16-0-0 ditto.

This gives a return of Rs. 4-14-9 per maund of crude resin, or a profit of 14 annas 9 pies excluding capital cost of still, &c., or about 10 annas per maund net. This result is most disappointing), but the experiments will be continued for another year with the still at Dehra in order to insure the products being very carefully manufactured and so thoroughly test the market value of resin, &c.

36. *Produce removed by free grantees, right and privilege holders.*—As a rule the figures given are based on careful estimates framed some years back of the produce removed by the Dehra Dún and Saháranpur holders of privileges to graze at reduced rates and gather free headloads of fuel, and by the villagers of Jaunsár Báwar who have timber, fuel, grazing privileges.

The privileged grazing in the plains and the timber in the hills are the only items checked from year to year.

The free grants are small in amount and as a rule are made in return for services rendered in connection with fire conservancy.

The estimated and actual issues under all heads compare as follows :—

	1888-89.		1889-90.	
	Quantity.	Value.	Quantity.	Value.
	Cubic feet.	Rs.	Cubic feet.	Rs.
i.—Timber	98,676	7,900	113,731	9,066
ii.—Fuel	1,668,848	50,530	1,702,124	50,024
iii.—Grass and grazing	...	7,838	...	7,836
iv.—Minor produce	...	500	...	662
Total	1,767,524	66,768	1,816,055	69,088

Adding the estimated value of the above to the cash revenue of the circle, we find that in 1888-89 it was Rs. 15 per cent. and in 1889-90 Rs. 14 per cent. of the total receipts from the forests.

CHAPTER V.

Financial Results.

37. The financial results of the year as compared with previous years is summarized as follows :—

	1886-87.	1887-88.	1888-89.	1889-90.
	Rs.	Rs.	Rs.	Rs.
Receipts	3,36,859	3,57,134	3,90,315	4,32,660
Expenditure	2,67,343	2,77,592	2,67,470	2,71,104
Surplus	69,516	79,542	1,22,845	1,61,556
Percentage of expenditure on receipts	79 36	77 72	68·52	62·66

The receipts include Rs. 27,606 realized in the Jaunsár Division on account of sleepers and standing trees sold in 1888-89; but, even excluding this sum, they are the highest yet recorded, and though some years in the future will probably present a less pleasant aspect, the financial results of 1889-90 should not be regarded as abnormal, but as evidence of improved management and the natural result of the increasing demand for forest produce that accompanies the general prosperity prevailing in northern India.

A comparison of the financial position for terms of years gives the following results :—

	Average annual receipts and charges for 12 years, 1878-79 to 1889-90.	Average annual receipts and charges for four years, 1878-79 to 1881-82.	Average annual receipts and charges for four years, 1882-83 to 1885-86.	Average annual receipts and charges for four years, 1886-87 to 1889-90.
	Rs.	Rs.	Rs.	Rs.
Receipts	3,09,227	2,62,944	281,496	3,79,212
Expenditure	2,62,304	2,74,856	241,180	2,70,877
Surplus (or deficit)	46,923	Deficit 7,912	40,316	1,08,305
Percentage expenditure to receipts	84·5	103 0	85 7	71·4

The increase in the receipts of the year is due to a brisk demand for produce both by the general market and by Government departments, which it has been possible to meet thanks to the working plans authorizing a bolder style of working the forests.

38. The receipts, charges and surplus in each division compare as follows :—

Division.	Receipts.			Expenditure.			Surplus.		
	Average of seven previous years, *i.e.*, 1881-82 to 1887-88.	1888-89.	1889-90.	Average of seven previous years, *i.e.*, 1881-82 to 1887-88.	1888-89.	1889-90.	Average of seven previous years, *i.e.*, 1881-82 to 1887-88.	1888-89.	1889-90.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Dehra Dún ...	73,394	96,956	1,05,239	50,443	51,103	45,806	22,951	45,853	59,433
Saháranpur ...	36,810	44,073	45,375	22,562	22,563	20,653	14,248	21,510	24,722
Jaunsár ...	1,84,099	2,48,595	2,81,413	1,60,159	1,71,185	1,70,658	23,940	77,410	1,10,755
Direction ...	1,537	691	633	37,760	22,619	33,987	—36,223	—21,928	—33,354
Total ...	2,95,840	3,90,315	4,32,660	2,70,924	2,67,470	4,71,104	24,916	1,22,845	1,61,556

The figures show steady improvement in all divisions.

39. The receipts, charges and surplus arranged under main heads are noted below :—

	Receipts.					Charges.				
	Amount.		Difference in 1889-90.		Budget heads.	Amount.		Difference in 1889-90.		Budget heads.
	1888-89.	1889-90.	Increase.	Decrease		1888-89.	1889-90.	Increase	Decrease.	
	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
i.—Receipts from departmental works.	2,46,215	2,52,330	6,115	...	I.	1,50,359	1,48,327	...	2,032	Debits varied to suit each division.
ii.—Other receipts,	1,44,100	1,80,330	36,230	...	II to V.	30,487	33,968	3,481	...	*Vide* Form
iii.—Formation, protection and improvement of forests.	...	...	...	...	...	86,624	88,809	2,185	...	62.
Total ...	3,90,315	4,32,660	...	...	...	2,67,470	2,71,104	3,634	...	

Departmental Works.

Dehra Dún and Saháranpur show decreased receipts by Rs. 4,326, while Jaunsár gives an increase of Rs. 10,441, chiefly on sleepers. The decrease under charges is

satisfactory because as far as possible all the charges for 1889-90 were defrayed by the close of the year and the outstandings are small in amount.

Other Receipts.

The "other receipts" in the three divisions stand as follows:—

	Rs.
Dehra Dún	11,545
Saháranpur	2,366
Jaunsár	22,377

The collections are fairly evenly divided under all the revenue heads II to V.

The increase in charges is moderate and calls for no note.

The charges for the formation and improvement of forests in each division are thus distributed:—

Division.	Amounts.		Difference in 1889-90.	
	1888-89.	1889-90.	Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.
Dehra Dún	24,433	22,716	...	1,717
Saháranpur	13,227	11,863	...	1,364
Jaunsar	41,424	42,902	1,478	...

The decrease in charges is, as a rule, due to reduction in planting operations and to cheaper arrangements for protecting the forests from fire. The increase in Jaunsár is due to the expenditure on Surveys."

40. The receipts and expenditure by budget heads compare as below:—

Year.	I. Timber and other produce removed from the forests by Government agency.	II. Timber and other produce removed from the forests by consumers and purchasers.	III. Confiscated drift and waif wood.	IV. Revenue from forests not managed by Government.	V. Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs
1888-89	2,38,790	1,28,110	7,425	13,795	2,195	3,90,315
1889-90	2,44,676	1,56,089	7,654	18,747	5,404	4,32,090
Difference, 1889-90, More,	5,886	27,979	229	4,952	3,209	42,345
Difference, 1889-90, Less,	...	...	...	..	...	...

Expenditure.

A.—Conservancy and works.

Year.	I. Timber and other produce removed from the forests by Government agency	II. Timber and other produce removed from the forests by consumers and purchasers	III. Confiscated drift and waif wood.	IV. Revenue from forests not managed by Government.	V. Revenue from leased forests.	VI. Purchase of live stock, store, tools and plant.	VII. Communications and buildings.	VIII Demarcation and improvement.	IX. Miscellaneous.	Total.
	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1888-89 ..	1,23,152	2,653	2,692	3,417	11,150	4,018	20,555	17,055	3,530	1,88,222
1889-90 ..	1,15,538	2,122	4,275	3,340	11,150	2,969	18,574	19,116	5,398	1,82,482
Difference, 1889-90, More .	...	..	1,583	...	...	...	...	2,061	1,868	...
Difference, 1889-90, Less .	7,614	531	...	77	...	1,049	1,981	...	...	5,740

B.—Establishments.

Year.	I. Salaries.	II. Travelling allowances.	III. Contingencies.	Total.
	Rs	Rs	Rs.	Rs
1888-89	67,122	6,807	5,319	79,248
1889-90	75,728	7,895	4,999	88,622
Difference, 1889-90 ... { More	8,606	1,088	...	9,244
{ Less	...	...	320	...

Receipts.—No further notes seem called for in connection with this subject.

Expenditure ; A, conservancy and works.—Under departmental works the three divisions show reduced charges as follows :—

	Rs.
Dehra Dún	4,000
Saháranpur	427
Jaunsár	3,179

the results of efforts to extend operations by purchasers.

The other variations, though satisfactory, are insignificant in amount.

Expenditure ; B, Establishments.—The increase in salaries is in the Direction Division and is due to Colonel Bailey while on leave and his *locum tenens* both drawing pay from the circle.

The increases under travelling allowances is in the Direction Division and Jaunsár and is due to Colonel Bailey drawing a fixed instead of a daily allowance and to some additional charges for range officers in the latter division.

41. The value of timber of other produce and of live and dead stocks (see Form 57) stood as follows :—

	Rs.	Rs.
Value, 1st April 1889, timber, &c.	1,12,700	
Ditto stock	1,31,155	
		2,43,855
Value, 31st March 1890, timber, &c.	1,17,529	
Ditto stock	1,33,072	
		2,50,601
Balance in favour of the year		6,746

In Dehra Dún the value of timber, &c., has temporarily increased by Rs. 2,545 owing to fuel awaiting delivery at Roorkee when the year closed.

In Saháranpur there is no change.

In Jaunsár the timber and fuel for Chakráta (which is safely stored in sheds) has been increased and accounts for the difference.

The increase in stock is nearly all under " buildings" (Rs. 1,852).

The outstandings due to the department amounted to Rs. 24,600 or Rs. 2,700 less than at the close of 1888-89. It has been previously explained that the departmental works account for the heavy advances. Rs. 8 were due from the department against Re. 1 last year.

The outstanding demand for revenue stood as follows :—

	1888-89. Rs.	1889-90. Rs
Dehra Dún	16,397	13,603
Saháranpur	3,952	466
Jaunsár	32,022	17,953
	52,371	32,022
Difference against the year		20,349

The change is due to the satisfactory working of the grazing rules in Dehra and Saháranpur, so that the grazing outstandings are nominal.

The value of the year's transactions stands as follows :—

	Rs
Cash surplus	1,61,556
Add increase in value of stock	6,746
Total ...	1,68,302

Deduct—			
	Rs.		
Balance of outstanding due to department against the year ...	2,703		
Ditto revenue due against the year...	20,349		
Due from department to sundry creditors	7		
		23,059	
Net financial results of 1889-90			1,45,243

CHAPTER VI.

General Remarks.

42. In the Jaunsár Division five maunds two seers of seed, chiefly deodár, were collected in compliance with indents.

43. Work on the herbariums of the three divisions has been duly carried on, and botanical and economic product collections are being made for the local forest school, for Cooper's Hill College and for the Indian Museum, London.

44. The review of the provincial forest reports for 1888-89 notes that the reports are in parts "of unnecessary length" and "overburdened with tabular statements of doubtful utility," while a previous review says "to comprehend and review" forest reports "is an infinitely more difficult task than to do this for the reports..... from any other department."

Every Forest Officer in the province probably reiterates these opinions and wishes that the orders of the Forest Code as to a "short report" to be written in a "concise manner" were duly enforced.

On the other hand, one of the reviews quoted above asks that a little life may be infused into the figures and that care may be taken to notice "*all matters of interest*" and furnish "*all necessary explanations,*" while the Forest Code prescribes 14 annual tabular statements (not to mention proposed additional forms, some with 32 columns), many of which as to detail resemble daily registers rather than annual abstracts.

Attention is invited to the question of forest annual statistical statements and the explanatory notes thereon as these are becoming a source of mischief. In the School Circle the range officers were in the height of the fire season employed in drawing up annual returns, and the divisional officers were respectively employed (chiefly at headquarters) for the best part of 5, 11 and 30 days respectively on their annual reports, the fullest report covering both sides of 86 pages of foolscap and carrying nine appendices.

The object sought by an annual report would appear to be to bring vividly before the Government and the officers of the department the results of the work of the year, their successes and shortcomings, and by comparison to stimulate the department to fresh efforts in the direction the Government wishes it to pursue. Lastly it is useful for reference.

Working on these lines orders are under issue in the School Circle that the data required from range officers shall be submitted in their monthly returns, and that the annual statements are to be compiled therefrom in the divisional office, so that range officers will have nothing to do with the annual report in the month of April. That divisional reports shall be as concise as possible (ordinarily 25 pages of half margin foolscap should suffice), be submitted by the 1st of May and carry no appendix save the fire conservancy report, which cannot be sent in until June or July. As far as possible tabular statements will be compiled in the circle office, and divisional officers will be relieved as much as possible.

45. It is hoped the information given in this report has brought prominently to notice the excellent service rendered by the divisional officers of the circle, and I am confident their merits will be duly recognised.

C. BAGSHAWE,

Conservator of Forests, School Circle,
N.-W. Provinces and Oudh.

NOTES ON FIRE CONSERVANCY

AND

ANNUAL STATEMENTS.

Appendix I.

PROTECTION OF FORESTS FROM FIRE.

1. When this report was sent to press, the fire season was not over, and the notes on fire-protection are therefore added in the form of an appendix.

2. The fire conservancy operations of the past and previous years compare as follows :—

Division.	Area in which protection was attempted.	Area actually protected.	Failures.	Percentage of failures to area actually protected.	Cost during the year.	Cost per acre of area actually protected.
	Acres.	Acres.	Acres.		Rs.	Pies.
Dehra Dún ... 1888-89 ...	157,513	151,°52	0,261	4·14	3,205	4 06
Dehra Dún ... 1889-90 ...	158,157	153,860	4,297	2 79	2,813	3 51
Saháranpur ... 1888-89 ..	143,259	118,412	24,847	20 98	2 404	3·89
Saháranpur ... 1889-90 ...	143,399	129,973	13,426	10·33	* 2,066	3 05
Jaunsár ... 1888-89 ...	98,888	98,356	532	·54	1,118	2·18
Jaunsár ... 1889-90 ...	98,709	97,413	1,296	1 33	1,489	2 93
Total ... 1888-89 ...	390,660	368,020	31,640	8·59	6,727	3 50
Total ... 1889-90 ...	400,265	381,246	19,019	4 98	6,368	3 20

* Includes Rs. 150 given as rewards.

The early cessation of the rains and the light rainfall during the winter months increased the danger from fire early in the season, but it also facilitated the burning of the fire lines and outer forests. The increase in the number of fires early in the season (November to March) 20 in 1890, against seven in 1889 may be attributed to the season, which also accounts for the larger area burnt in Jaunsár. The reduction in the total area burnt is due to the decrease in incendiarism in Saháranpur and in some measure to cleanly-burnt outer lines. The returns of the year compared with those for 1889 show favourable results :—

I.—Increase in area attempted ... ... 605 acres.
II.— Ditto protected ... ... 13,226 „
III.—Percentage of total forest area under protection (70 77 %) increase ... ·15 per cent.
IV.—Decrease in expenditure ... ... 359 Rs.
V.—Percentage of failures 4 98; decrease ... ... 3·61 per cent.
VI.—Area attempted in hills 98,709 acres; decrease ... ... 179 acres.
VII.— Ditto in plains 301,556 acres; increase ... ... 784 „
VIII.—Cost per acre attempted, pie 3·05; decrease ... ... ·18 pie.
IX.— Ditto protected, pie 3·20; ditto ... ... ·30 „
X.— Ditto of hill forest attempted pie 2·90; increase ... ... ·73 „
XI.— Ditto of plains ditto 3 10; decrease . ... ·47 „

The changes in the areas under protection are summarised as follows :—

Additions.

	Acres.	
Dehra Dún.—Ganges range, Kanaran coppice	300	
All ranges, net addition on re-calculation of areas	344	
		644
Saháranpur—Central Range, Lálwála, new area		140
Jaunsár,—Deogarh range, Katang, new area	200	
All ranges, net addition on re-calculation of areas	761	
		961
Total addition ...		1,745

Exclusions.

Jaunsár Division.—Deoban Range, Konain and Deogarh ranges, Chandnigádh, Hartar	1,140
Net increase ...	605

A very interesting experiment has been tried by Mr. Moir in the chír forests of Jaunsár. The highly inflammable nature of chír forests which have been protected from fire for many years, and the disastrous effects of fire in such forests late in the fire season are well known, while it seems nearly certain that sooner or later every chír forest will be burnt over as the danger from fire constantly increases instead of decreasing as in sál or teak forests. With a view to minimising the chance of all reproduction being periodically destroyed, Mr. Moir proposed the following experiment. In Chandnigádh a chír forest worked more than 19 years ago, and in which nearly continuous protection from fire and grazing for 18 years has produced a full crop of saplings and poles, Mr. Moir proposed to remove the heavy accumulation of spines, &c., by firing the forest early in the season, working down hill on a still night. The operation was carefully carried out during February 1890, and in May last the poles and saplings appeared little injured and were throwing up healthy shoots: only seedlings up to about four years old appear to have been killed, and in favourable localities many of these escaped. For special reasons it is proposed now to limit fire-protection in the Chandnigádh block to supervising the early burning of the forest, and also to open it to grazing. It would be preferable to have periodical burnings at about three-year intervals instead of regular annual fires; but even as it is there appears to be every hope that the future of the Chandnigádh chír is assured. By a curious coincidence Mr. Bryant, Deputy Conservator of Forests, Naini Tal Division, proposed and is making some nearly similar experiments at Ránikhet, *viz.*, burning early in the season (and down hill at night) small areas of forest in which protection has resulted in a complete or nearly complete crop of saplings and poles, the fires are to be repeated at intervals of two, three, and four years in different plots. It is certain that for three or four years after a fire in a chír forest has cleared the ground of pine leaves the protection of the forest is fairly easy, so that it may be hoped these experiments will prove that continued protection for 10 or 15 years, which will give us a complete advance growth, followed by regulated periodic firing, will enable us to manage chír forests with a fair assurance of success. At present the risk of failure in fire conservancy in chír forests, and the consequent failure to ensure reproduction, is so great, that no scheme of management for forests of this class is worth the paper it is written on, the results of the experiments will therefore be watched with great interest.

The effects of fire-protection on the floods in the Siwáliks is the subject of special experiments, and a separate report on the subject has been submitted.

3. The cost of fire-protection in each division is as follows :—

Division.		Area actually protected.	Percentage of total forests area protected.	Length of fire lines.	Cost of—					
					Clearing lines.	Burning lines.	Fire watches.	Extinguishing fires.	Total.	Per acre.
		Acres.		Miles.	Rs.	Rs.	Rs.	Rs.	Rs	Pies.
Dehra Dún ...	Previous ten years ...	69,201	...	...	...	...	...	...	3,873	10·73
	1888-89 ...	151,252	85·42	315	841	825	1,204	335	3,205	4·06
	1889-90 ...	153,860	86·04	348	641	805	1,268	99	2,813	3·51
Saháranpur ...	Previous ten years ...	55,476	...	...	...	...	...	...	2,869	8·20
	1888-89 ...	118,412	62·79	122	390	194	1,292	523	3,404	3·89
	1889-90 ...	129,078	68·93	99	319	183	1,362	202	2,066	3·05
Jaunsár ...	Previous ten years ...	78,556	...	...	...	...	...	...	1,303	3·55
	1888-89 ...	98,356	66·92	343	76	860	154	28	1,118	2·18
	1889-90 ...	97,413	66·09	352	45	1,131	174	139	1,489	2·93
Total ...	Average of previous ten years.	102,293	...	...	...	...	...	...	7,605	7·36
	1888-89 ...	368,020	71·79	780	1,307	1,879	2,650	891	6,727	3·50
	1889-90 ...	381,240	85·59	799	1,005	2,119	2,804	440	6,363	3·20

The cost of protection is lower in both Dehra Dún and Saháranpur Divisions; while the dry season rendered necessary a larger expenditure on fire-watchers in Jaunsár, and increased the charges by Rs. 371.

4. The area burnt during the past fire season is considerably below the area of last year, but is still very large, aggregating 20 square miles. The cause of the different fires may be classified under the main heads as below :—

Year.	I. By forest establishment when burning lines, &c.		II. Fires which entered the forests by crossing exterior fire lines.		III. By workmen not in forest employ, by accident.		IV. By villagers, travellers, or soldiers by accident.		V. Fire caused by lightning.		VI. Fires maliciously lighted inside the forests.		VII. Causes unknown.		VIII. Total.	
	No.	Area in acres	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.
1889-90 ...	10	1,441	4	6,568	4	281	8	1,842	..	...	3	7,172	7	1,715	36	19,019
1888-89 ..	1	2	4	18,697	1	1	10	1,089¼	..	...	5	10,825	1	125	22	31,639¼
1887-88 .	9	2,506	1	7,750	1	410	10	357	1	263	3	4,163	111	3,303	35	18,758
1886-87 ...	10	2,349	1	26,500	...	...	6	498	.	...	9	8,021	9	328	35	37,696

The large number of fires (heads I and II) due to the shortcomings of the establishment is unsatisfactory as being due to preventable causes such as indiscreet firing of or badly burnt outer lines, but due weight should be given to the large percentage of each division under protection, and in some cases to difficulties about burning grass lands outside forest bounds. The detail of the 36 fires of the year may be thus summarised.

No.	Range.	Block.	Date of fire.	Year of protection.	Area burned.	Remarks as to cause of fire.
			DEHRA DÚN DIVISION.			
1	Jumna Range ..	Majri ..	24th May 1890 ..	1884 ...	1,260	Cause unknown.
2	Ditto ...	Darnrit ...	Ditto ..	1884 ...	140	
3	Malhan ...	Manaksidh ...	10th April 1890 ..	1878 ...	6	Caused by a cartman: no conviction.
4	Do. ...	Ihajra ..	27th ditto ..	1884 ...	50	Cause not known.
5	Do. ...	Bainkhala ...	Ditto ..	1884 ...	30	
6	Ramgarh ...	Balindswála ..	21st January 1890 ..	1872 ...	3	During fire line burning.
7	Lachiwála ...	Uperwála Song ...	2nd May 1890 ..	1883 ...	23	Probably caused by some Gurkhas endeavouring to take a bees' hive: no conviction.
8	Ditto ...	Dudhli ...	24th ditto ..	1883 ...	8	Caused by a pall of Dudhli.
9	Ditto ...	Saura Siroli ...	5th June 1890 ..	1888 ...	20	Caused by villagers smoking out bees.
10	Ganges ..	Kochpura ...	21st January 1890 ..	1883 ..	202	A piece of burning grass was blown into the forest from fire line; pure accident.
11	Do. ..	Johra ...	18th February 1890 .	1883 ..	34	Cause unknown.
12	Do. ..	Bahera ..	21st April 1890 ..	1878—81 ..	780	Accident during the burning of a fire line between the Ganges and Ramgarh Ranges.
13	Tirsál ..	Barkot ...	17th February 1890...	1887 ...	26	Cause unknown.
14	Do. ..	Salukot ..	29th March 1890 ...	1887 ..	1,025	Attributed to graziers: no conviction.
				Total ...	4,297	
		In 1888-89 11 fires extending over		...	6,261	acres.
			SAHÁRANPUR DIVISION.			
1	Western ..	Sháhjahánpur ...	23rd May 1890 ...	1887 ..	2,510	Lighted by an incendiary: under inquiry.
2	Do. ..	Khujnawar ...	Ditto ...	1887 ...	1,373	Fire came from Sháhjahánpur block.
3	Central ..	Lakarkot ...	20th January 1890 ..	1879 ...	3	Origin of the fire unknown.
4	Do. ...	Tira ...	24th March 1890 ..	1884 ...	60	Fire left by a boy on the edge of the forest crossed outer line into the closed area
5	Do. ..	Gholua ..	30th ditto ..	1886 ...	463	Uncertain; probably lit by an incendiary.
6	Do. ...	Rasulpur ..	20th April 1890 ...	1879 ...	1,987	Fire crossed from the Ganjarban block.
7	Do. ...	Ganjarban ..	Ditto ...	1879 ..	2,483	Unknown, probably lit by an incendiary.
8	Do. ...	Sendhli ...	26th December 1889,	1883 ..	2,179	Ditto ditto.
9	Do. ...	Do. ..	4th May 1890 ...	1880 ..		
10	Do. ...	Pathri ..	18th November 1880,	1880 ...	251	Sparks from the railway engine started afore which entered the closed forest.
11	Do. ...	Do. ...	20th December 1889,	1886 ..		Carelessness of establishment in burning fire lines.
12	Do. ...	Harnaul ..	24th March 1890 ...	1886 ...	2,035	Fire crossed from the Tira block.
13	Do. ...	Do. ..	30th ditto ...	1886 ...		Ditto ditto Gholua block.
14	Do. ...	Cirak ..	27th April 1890 ..	1886 ...	82	Uncertain; probably lighted by an incendiary.
				Total ...	13,426	
		In 1888-89 16 fires extending over		...	24,847	acres.
			JAUNSÁR DIVISION.			
1	Deoban ...	Maraunwa ..	27th November 1889,	1869 ...	4	Carelessness of the forest guard whilst burning the fire lines: the man has been reduced.
2	Do. ...	Chatri ...	29th ditto ..	1869 ..	3	
3	Do. ...	Missau ..	1st December 1889..	1869 ...	4	
4	Do. ...	Thuina ..	4th—7th May 1890..	1872 ..	420	Due to carelessness of villagers setting fire to waste land outside the reserved forest of Kalsi. These fires are still under investigation.
5	Do. ...	Panjgáon ..	Ditto ..	1872 ...	250	
6	Do. ...	Dhaira ..	Ditto ..	1872 ...	40	
7	Bawar ...	Lokhar ...	23rd November 1889,	1872 ...	1	Carelessness of sivans.
8	Do. ...	Kunjawar ...	20th April 1890 ..	1872 ...	10	Ditto of dák-runners.
9	Deota ...	Patangni ...	25th November 1889,	1879—84...	1	Carelessness of sawyers, leaving fire burning in hut in closed forest.
10	Do. ...	Naintwar ...	20th December 1889,	1885 ..	90	Cause not known, but supposed to be carelessness during burning fire line.
11	Do. ..	Suras ...	4th January 1890 ...	1879—84...	50	Carelessness of villagers whilst grazing cattle.
12	Do. ..	Dumrari ...	10th ditto ...	1879—84 .	10	Ditto ditto.
13	Do. ..	Molta ..	27th February 1890..	1879—84..	103	Accident during burning the fire line.
14	Deogarh ..	Banpur ...	27th October 1889 ..	1872—75..	200	Due to carelessness of smith and coolie burning charcoal: both sentenced to three months' imprisonment.
15	Do. ...	Majog ...	1st November 1889 ..	1886 ..	45	Carelessness of travellers leaving fire burning at camping ground.
16	Do. ...	Do. ..	9th March 1890 ...	1886 ..	65	Carelessness of sawyers whilst sawing chir timber.
				Total ..	1,296	
		In 1888-89 eight fires extending over		..	532	acres.
			GRAND TOTAL FOR THE CIRCLE	...	19,019	

The history of the fires in the Dehra Dún is satisfactory as disclosing no wilful incendiarism, while the reduced area shows good work. In Saháranpur there were three incendiary fires against five last year, and the areas lost were small. The cases are now under inquiry at Roorkee and it is hoped convictions will be obtained. The exemplary punishment awarded for last year's fires in the western range, and the steady aid given by the Collector and by the Superintendent of Police, have had a good effect and the western range suffered much less than last year. In Jaunsár the most extensive fires were in roughly protected, scrub forest near Kalsi, and considering the dryness of the season the results obtained are very satisfactory. The Divisional Officers invite attention to the specially good services rendered by—

Forest Ranger Har Sarup (II), Ramgarh Range, Dehra Dún.

Forester Pirbhu Lal, Central Range, Saháranpur.

Forest Ranger Keshavanand, Deoban Range, Jaunsár.

DEHRA DÚN :
16*th July* 1890.

C. BAGSHAWE,
Conservator of Forests, School Circle,
N.-W. Provinces and Oudh.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. P. AND OUDH.

AREA OF RESERVED, LEASED, PROTECTED, AND UNCLASSED STATE FORESTS 1889-90.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other head.	Area on 1st March 1890.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		I.—Reserved Forest.								
Dehra Dún. Jumna	Dehra Dún ...	Ambári	4,203	7	...	...	4,203	7		
		Chandpur	2,251	3	...	...	2,251	3		
		Jumna	9,130	14	...	...	9,130	14		
		Timli	19,704	31	...	...	19,704	31		
Malhan	Ditto ...	Sherpur	13,922	22	...	...	13,922	22		
		Chandrabani ...	7,289	11	...	...	7,289	11		
		Dholkot	4,810	8	...	...	4,810	8		
Ramgarh ...	Ditto ...	Ramgarh	10,482	17	...	...	10,482	17		
		Bulawála	14,965	23	...	...	14,965	23		
Lachiwála ...	Ditto ...	Nágsidh	17,055	27	...	...	17,055	27		
		Málkot	5,641	9	...	...	5,641	9		
		Tháno	6,576	10	...	...	6 576	10		
		Tirsál	18,072	28	...	...	18,072	28		
Tirsál	Ditto ...	Tapoban	489	1	...	...	489	1		
		Birbhaddar ...								
Ganges	Ditto ...	Kánsrao	20,402	32	...	...	20,402	32		
		Motichur	22,073	34	...	...	22,073	34		
		Total, Dehra Dún Division.	177,064	277	...	...	177,064	277		
Saháranpur. Western ...	Saháranpur ...	...	81,862	128	...	2	81,860	128	G. O. No. 257F./87-8, dated 5th April 1889.	Settled on the Fakir at Barkala.
Central ...	Ditto ...	...	74,961	117	...	...	74,961	117		
Eastern ...	Ditto ...	...	31,743	50	...	...	31,743	50		
		Total Saháranpur Division.	188,566	295	...	2	188,564	295		

Area of reserved, leased, protected, and unclassed State Forests 1889-90—(concluded).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other head.	Area on 1st March 1890.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Jaunsár.										
Deoban ...	Dehra Dún ...	Kálsi	4,568	7	...	...	4,568	7		
		Strips on Jumna and Tons.	422	1	...	...	422	1		
		Singori, Kua, Korwa, Kothár, Bandla and Raura.	787	1	...	...	787	1		
		Amláwa	285	...	...	...	285	...		
		Lokandi	6,339	10	...	...	6,339	10		
		Deoban	6,580	10	...	...	6,580	10		
		Ekra	5,313	8	...	...	5,313	8		
		Karamba	11,842	19	...	...	11,842	19		
		Komain	4,654	7	...	...	4,654	7		
Bawar	Ditto ...	Rikhar	6,450	10	...	...	6,450	10		
		Dharagádh ...	13,540	21	...	...	13,540	21		
		Dharmigádh ...	10,013	16	...	...	10,013	16		
Deogarh ...	Ditto ...	Bastil	3,085	5	...	...	3,085	5		
		Deogarh	11,272	18	...	...	11,272	18		
		Khunigádh ...	11,974	19	...	...	11,974	19		
		Total, Jaunsár Division,	97,124	152	...	...	97,124	152		
		GRAND TOTAL OF RESERVED FORESTS.	462,754	724	...	2	462,752	724		
		II.—Leased Forests.								
Deogarh ...	Pánjab Hill States.	Raiengarh ...	5,002	8	423 (1)	...	5,425	9	...	(1) Increase due to recalculation of area.
		Dadi including Ori ...	1,630	2	...	...	1,630	2		

Jaunsár.	Deota	Tehri Garhwál,	Deota	4,937	8	...	...	4,937	8	
			Bámsu	2,323	4	...	...	2,323	4	
			Surás	1,014	2	...	...	1,014	2	
			Dátmir	2,560	4	...	...	2,560	4	
	Kotigádh ...	Ditto ...	Naintwár... ..	3,000	5	...	...	3,000	5	
			Sáhlra	22,000	34	...	...	22,000	34	
			Noranu							
			Chánsil							
			Lambatách ...	2,883	4	...	..	2,883	4	
			Kotigádh	3,968	6	...	..	3,968	6	
			Total, Leased Forest ...	49,317	77	423	...	49,740	78	
			III.—Protected Forests. *Nil.*							
			IV.—Unclassed State Forests.							
			Chakrata Cantonment Forests comprising—							
	Deoban ...	Dehra Dún	Lurli	290	...	...	...	290	...	
			Sutoli	188	...	...	...	188	...	
			Forest garden ...	43	13	...	...	48	...	
	Dehra Dún ...	Ditto ...	Wastes lands available for cultivation.	8,206		...	...	8,206	13	
			Total, Unclassed State Forests.	8,732	13	...	...	8,732	13	
			GRAND TOTAL OF FOREST LAND.	520,803	815	423	2	521,224	815	

Abstract of changes during the year.

	Acres.
Area at commencement of year	520,803
Added during the year	423
	521,226
Excluded	2
	521,224

CAMP :
The 18th June 1890.

C. BAGSHAWE,
Conservator of Forests, School Circle, N.-W. P. & Oudh.

[Form No. 50.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

PROSECUTIONS FOR BREACHES OF FOREST RULES DURING 1889-90.

Forest Division and Civil District.	Cases pending from 1888-89.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission, or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Dehra Dún district.														
I.—Prosecutions in the Courts of Law.														
Dehra Dún	...	...	...	...	...	...	...	...	...	...	...	...	...	
Sahâranpur	...	1	1	...	2	4	4	4	15	...	1	4	16	
Jaunsár	...	1	1	...	4	6	6	6	8	...	1	6	9	
Total for the Circle ...	...	2	2	...	6	10	10	10	23	...	2	10	25	
II.—Cases compounded under section 67 of Forest Act.														
Dehra Dún	...	1	10	2	4	17	17	17	50	...	...	17	50	
Sahâranpur	...	...	21	7	3	31	31	31	101	...	...	31	101	
Jaunsár	...	12	22	14	2	50	50	50	98	...	...	50	98	
Total for the Circle ...	...	13	53	23	9	98	98	98	249	...	...	98	249	

CAMP:
The 18th June 1890.

C. BAGSHAWE,
Conservator of Forests, School Circle, N.-W. P. & Oudh.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH. [Form No. 51.

AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON OF 1890, TO ACCOMPANY REPORT FOR 1889-90.

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1889.	During dry season of 1890.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
			Acres.	Acres.	Acres.	Acres.	Rs.	
	Jumna Range.							
	Ambári	1887	4,178	4,203	...	4,203	84	
	Chandpur	1887	2,251	2,251	...	2,251	106	
	Jumna	1886	8,305	8,305	...	8,305	86	
	Timli	1884	19,704	19,704	1,400	18,304	250	
	Total	...	34,438	34,463	1,400	33,063	526	
	Malhan Range.							
	Dholkot	1884	4,826	(1) 4,810	80	4,730	133	(1) Area reduced by 16 acres according to the Working Plan.
	Sherpur	1884	11,193	13,922	...	13,922	150	
	Chandrabani	1878	7,289	7,289	6	7,283	117	
	Total	...	23,308	26,021	86	25,935	400	
	Ramgarh Range.							
	Ramgarh	1878	10,232	10,232	...	10,232	127	
	Bullawála	1872	14,525	14,525	3	14,522	220	
	Total	...	24,757	24,757	3	27,754	347	
Dehra Dún	**Lachiwala Range.**							
	Nágsidh	1883	11,568	(2) 13,393	31	13,363	213	(2) Area increased by 1,825 acres, according to new calculation of area.
	Thano	1877	6,443½	6,576	...	6,576	164	
	Málkot	1888	6,888	(3) 5,641	20	5,621	65	(3) Area decreased by 1,465 acres, according to the Working Plan.
	Total	...	24,899½	25,610	51	25,559	442	
	Ganges Range.							
	Kánsrao	1879-81	14,357	(4) 14,657	780	13,877	372	(4) New area 300 acres, in Nichla Suswa coppice.
	Motichur	1883	15,693	18,763	326	18,437	278	
	Total	...	30,050	33,420	1,106	32,314	650	
	Tirsal Range.							
	Tirsál	1887	13,750	13,836	1,651	12,185	439	
	Birbhaddar	1888	50	50	...	50	9	
	Total	...	13,800	13,886	1,651	12,235	448	
	Total, Dehra Dún Division	...	151,252½	158,157	4,297	153,960	2,813	

(31)

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON OF 1890, TO ACCOMPANY REPORT FOR 1889-90.

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1889.	During dry season of 1889.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failures.	Actully protected.		
	Western Range.		Acres.	Acres.	Acres.	Acres.	Rs.	
Saháránpur ...	Khára	1879	9,612	9,612	...	9,612	125	
	Bádshahibágh	1885	7,066	7,066	...	7,066	87	
	Chapri	1885	2,765	2,765	...	2,765	51	
	Khaironwála	1885	1,376	2,970	...	2,970	76	
	Barkala	1885	2,503	5,133	...	5,133	29	
	Kasumri	1885	2,579	2,579	...	2,579	33	
	Sahensra	1885	4,258	6,048	...	6,048	64	
	Kotri	1885	19	2,669	...	2,669	54	
	Kaluwála	1885	686	5,116	...	5,116	59	
	Sháhjahánpur	1887	5,417	9,572	2,510	7,062	40	
	Khujnawár	1887	8,212	8,392	1,373	7,019	52	
	Budhaban	1887	3,771	3,771	...	3,771	24	
	Mohand	1884	6,117	6,131	...	6,131	143	
	Total ...	...	54,381	71,824	3,883	67,941	837	
	Central Range.							
	Sákh	1884	4,975	5,111	...	5,111	78	
	Chillawála	1882	7,782	7,782	...	7,782	5	
	Gáj	1882	3,578	3,578	...	3,578	5	
	Andheri	1882	5,719	5,719	...	5,719	7	
	Dholkhand	1880	3,916	3,916	...	3,916	30	
	Malowála	1880	2,122	2,122	...	2,122	5	
	Bám	1880	2,250	3,013	...	3,013	5	
	Betban	1882	5,124	6,781	...	6,781	59	
	Gholna	1886	3,746	3,746	463	3,283	47	
	Lálwála	1884-89	499	(1) 639	...	639	59	(1) New area 140 acres.
	Bániwála	1883	500	500	...	500	53	
	Lakarkot	1879	3,646	3,646	3	3,643	173	
	Ganjarban	1879	2,833	2,833	2,483	350	84	
	Basulpur	1879	1,987	1,987	1,987	...	45	
	Sendhli	1883	2,560	2,560	2,179	381	109	
	Tira	1884	1,791	1,791	60	1,731	62	
	Total ...	...	53,028	55,724	7,175	48,549	826	
	Eastern Range.							
	Harnaul	1886	2,035	2,035	2,035	...	55	
	Chírák	1886	3,860	3,860	82	3,778	44	
	Rauli	1879	2,279	3,038	...	3,038	26	
	Ránipur	1879	1,159	4,885	...	4,885	33	
	Maiapúr	1886	1,332	1,361	...	1,361	23	
	Pathri	1880	320	672	251	421	72	
	Total ...	...	11,003	15,851	2,368	13,483	253	
	Total, Saháránpur Division ...	...	118,412	143,399	13,426	129,973	1,916	

	Deoban Range.									
	Kálsi	1872	3,003	3,008	710	2,298	16			
	Bairáť									
	Amláwá									
	Cantonment blocks and Forest Garden	1880	560	561	...	561	15			
	Lokandi	1869	5,712	5,722	11	5,711	49			
	Deoban	1872	5,790	5,800	...	5,800	55			
	Ekra	1872	2,670	2,670	...	2,670	13			
	Konain	1872	3,776	(6) 2780	...	2,780	14	(6) 1,000 acres excluded.		
	Karamba	1872	3,621	3,621	...	3,621	15			
	Total ...	...	25,132	24,162	721	23,441	157			
	Bawar Range.									
	Biknár	1872	4,600	(7) 4,900	...	4,900	55	(7) Revised calculation of area, increase 300 acres		
	Dhárégádh	1872	6,055	6,055	1	6,054	65			
	Dharmigádh	1872	2,688	(8) 2,676	...	2,676	45	(8) Revised calculation of area, increase 38 acres.		
	Bástil	1875	1,669	1,669	...	1,669	38			
	Kunjáwar	1884	100	100	10	90	14			
	Total ...	...	15,062	15,400	11	15,389	217			
	Deota Range.									
	Khúnígád									
	Molta	1879-84	4,157	4,157	103	4,054	318			
Jaunsár ...	Chatra									
	Hanol									
	Deota	1879-84	4,937	4,937	1	4,936				
	Bámsu	...	2,323	2,323	...	2,323	247			
	Surás	...	1,014	1,014	60	954				
	Dátmir	1872	2,560	2,560	...	2,560	12			
	Naintwár	1885	3,000	3,000	90	2,910	55			
	Sálhra	1885	7,500	7,500	...	7,500	...			
	Noranu	1885	1,500	1,500	...	1,500	48			
	Total ...	...	26,991	26,991	254	26,737	680			
	Deogarh Range.							(9) 200 acres added at Katang and 140 abandoned at Hartar.		
	Deogarh	1872-75 1886-87	4,588	(9) 5,150	310	4,840	155	(10) 423 acres nominally added at Raiengarh.		
	Raiengarh	1880	5,002	(10) 5,425	...	5,425	25			
	Dádi	1880	1,730	1,730	...	1,730	40			
	Total ...	...	11,320	12,305	310	11,995	220			
	Kotigad Range.									
	Chánsil	1885	13,000	13,000	...	13,000	45			
	Kotigád	1879	3,968	3,968	...	3,968	30			
	Lambatách	1879	2,883	2,883	...	2,883	120			
	Total ...	...	19,851	19,851	...	19,831	195			
	Total, Jaunsár Division ...		98,356	98,709	1,296	97,413	1,489			
	GRAND TOTAL FOR THE CIRCLE ...	...	368,020½	400,265	19,019	381,246	6,218			

DEHRA DÚN :
The 16th July 1890.

C. BAGSHAWE,
Conservator of Forests, School Circle, N.-W. P. & Oudh.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

AREA OF PLANTATION, 1889-90.

Division.	Name of plantation.	Area in acres.				Receipts.	Charges.	Total charges upto 31st March 1890.	Remarks.
		On 1st April 1889.	Added during the year.	Excluded during the year.	Area on 31st March 1890.	Of the year.			
		Regular Plantations.							
		Acres.	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.	
Saháranpur	Ferozpur (chiefly sissu)	80½	...	..	80½	...	...	1,097	
	Total ...	80½	...	...	80½	..	...	1,097	
		Cultural Operations.							
Dehra Dún	Phandowála (Tun– Broussonetia)	5½	...	...	5½	...	12	6,359	
	Ramgarh (sál, bamboos, &c.)	30	...	*30	...	...	22		
	Johra (bamboo and Parduni nursery)	86	...	...	86	...	143		
	Sherpur	½	...	*½	...	...	...	6	* Struck off.
	Jamankhata	...	...	*	...	...	...		
	Total ...	122½	...	30½	91½	...	177	6,365	
	Pathri (fire line)	3½	...	3½	...	...	...	48	
	Ganjarban (sál)	11½	½	...	11½	...	5	847	
	Ranipur (bamboos)	13½	...	...	13½	...	11	1,324	
	Bám (sál)	8¼	...	...	8¼	...	10	731	

Saháranpur	Sendhli (sál)	...	8	...	...	8	...	8	640
	Tira (miscellaneous)	...	1	...	1	...	...	...	655
	Gáj (sissú)	...	...	...	...	...	...	44	203
	Dhaula (sál)	...	3	...	...	3	...	19	102
	Lakarkot (compartment No. 4 miscellaneous) ...	...	...	...	...	...	...	...	10
	Total	...	48½	½	4½	44½	...	97	4,560
Jaunsár	Korwa (chír, kail, ban, &c.)	...	33	...	8	25	...	10	316
	Mohna (rai, deodár, kharsu)	...	183	4	...	187	...	145	3,854
	Matkangra (moru)	...	64	10	...	74	...	68	921
	Hajáwa (rai sowings)	...	3	5	...	8	...	80	95
	Kanjatra (rai, kail, morinda)	...	4	...	...	4	...	...	733
	Ditto (deodár and kail)	...	22	...	...	22	...	132	668
	Kanasár (ditto)	...	9	...	...	9	...	...	1,656
	Bodyár (chiefly deodár)	...	139	...	...	139	...	131	5,206
	Kathian (deodár)	...	405	10	...	415	...	41	3,156
	Konain (chiefly deodár)	...	231	20	...	251	...	...	2,465
	Panchkoti (deodár)	...	122	...	...	122	...	28	28
	Mundáli (do.)	...	...	5	...	5	...	149	282
	Pártil (do.)	...	5	26	...	31	...	34	1,035
	Jaunási (do.)	...	48	...	...	48	...	16	296
	Temple (do.)	...	15	...	...	15	...	46	186
	Goria (do.)	...	24	7	...	31	...	20	124
	Dampti (deodár and kail)	...	10	...	...	10	...	...	983
	Chakora (deodár)	...	100	...	...	100	...	15	346
	Gurasna (do.)	...	34	...	...	34	...	10	90
	Ola block (deodár sowing)	...	2	...	...	2	...	337	337
	Morách (deodár)	...	...	64	...	64	...	27	466
	Raiengarh Cháchpur (deodár)	...	16	...	...	16	...	90	565
	Lorli cantonment (do.)	...	17	...	...	17	...	27	1,527
	Sutoli do. (do.)	...	75	...	...	75	...	12	508
			22	...	...	22	...		
	Total	...	1,583	151	8	1,736	...	1,418	25,843
	Total of cultural operations for the Circle	...	1,753½	151½	43	1862½	...	1,692	36,768

CAMP:
The 11th June 1890.

C. BAGSHAWE,
Conservator of Forests, School Circle, N.-W. P. & Oudh.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

AREA OF PLANTATION, 1889-90.

Division.	Name of plantation.	Area in acres.				Receipts.	Charges.	Total charges up to 31st March 1890.	Remarks.
		On 1st April 1889.	Added during the year.	Excluded during the year.	Area on 31st March 1890.	Of the year.			
Dehra Dún.		Climber cutting.				Rs.	Rs.	Rs.	
Ramgarh ...	Bulawála ...	2,880	725	...	3,605	...	54	307	
	Ramgarh ...	6,332	...	...	6,332	...	...	409	
Lachiwála ...	Thíno ...	5,912	310	...	6,222	...	26	467	
	Dudhli ...	1,545	130	...	1,675	...	15	140	
	Lachiwála ...	...	1,493	...	1,493	...	131	131	
Ganges ...	Bahera ...	4,093	2,000	...	6,093	...	216	448	
Tirsál ...	Tirsál (Barkot)	1,340	630	...	1,970	...	73	263	
	Sainkot ...	374	...	...	374	...	...	86	
Malhán ...	Chandrabani	8,008	250	...	8,258	...	25	732	
	Dholkot ...	75	...	...	75	...	...	3	
	Sherpur ...	...	1,200	...	1,200	...	98	98	
Jumna ...	Timli ...	2,389	3,000	...	5,389	...	223	325	
	Rámpur Mandi	30	...	...	30	...	...	43	
	Kulhál ...	320	...	...	320	...	...	28	
	Aduwála ...	1,760	...	...	1,760	...	...	211	
	Total ...	35,058	9,738	...	44,796	...	161	3,691	
Sahárunpur.									
Central Range ...	Lalwála compartment I	70	...	...	70	...	...	23	
	Ditto ditto II	...	70	...	70	...	5	5	
	Lakarkot ditto V	600	...	...	600	...	...	13	
	Ditto ditto VII	...	683	...	683	...	44	44	
	Ganjarban ...	1,600	...	...	1,600	...	...	64	
	Rasulpur ...								
	Badsháhibágh ...	...	45	...	45	...	10	10	
	Total ...	2,270	798	...	3,068	...	59	159	
Jaunsár.									
Deoban Range ...	Haripur block, Kálsi Forest ...	640	...	...	640	...	...	57	
	Total for the Circle ...	37,968	10,536	...	48,504	...	920	3,907	

Dehra Dún.												
						Cutting back of injured Sal.						
Ramgarh Range	Bukawála					1,707	...	...	1,707	...	...	611
	Assaroi and Muhammadpur					2,143	...	...	2,143	...	...	1,702
	Phandowála					...	900	...	900	...	708	708
Malhán „	Chandrabani (Laldháng)					1,423	...	...	1,423	...	...	914
	Ditto (Manaksidh)					...	300	...	300	...	90	90
Lachiwála „	Nágsidh (Nawáda)					456	...	...	456	...	...	309
Tirsál „	Barkot					366	...	...	366	...	...	293
				Total		6,095	1,200	...	7,295	...	798	4,722
						Girdling of inferior species.						
Jumna Range	Jumna					1,200	1,150	...	2,350	...	184	449
Malhán „	Malhán					760	1,200	...	1,960	...	206	676
Ramgarh „	Ramgarh					500	500	...	1,000	...	160	530
Lachiwála „	Lachiwála					700	1,200	...	1,900	...	219	408
Ganges „	Ganges					1,000	2,000	...	3,000	...	284	445
Tirsál „	Tirsál					...	500	...	500	...	79	79
				Total		4,160	6,550	...	10,710	...	1,132	2,587
Jaunsár.												
						Girdling of inferior species to encourage deodar reproduction (before fellings).						
Kotigádh Range	Bunarpani					140	...	...	140			
	Chakora					130	...	...	130			
	Pártil					200	...	...	200			
	Temple					95	...	...	95	...	6	68
	Kanga					50	...	...	50			
Deota „	Patángni					70	...	...	70			
	Bánsu					368	98	...	466			
	Dakuri					132	1,350	...	1,482	...	846	1,247
	Tutwa block, Mundali Forest					285	150	...	435	...	86	189
Bawár „	Sangared near Koti Bawár					...	72	...	72	...	42	42
				Total		1,470	1,670	...	3,140	...	980	1,546
						Thinning and girdling inferior species above young deodar growth (after fellings).						
Bawár Range	Kathian					409	...	...	409	...	...	50
	Thanwár					510	...	...	510			
	Chakora					257	200	...	457			
Kotigádh „	Lohásu					303	...	...	303	...	56	381
	Gurasus					295	...	...	295			
	Bunarpani					...	100	...	100	...	23	23
	Pártil					358	...	...	358	...	...	239
Deota „	Temple					30	...	...	30	...	...	8
Deogarh ...	Raiengarh					12	...	...	12	...	...	5
	Kotikanasár					24	30	...	54	...	45	73
	Bodyár					12	...	...	12	...	15	15
Deoban „	Kopti					...	8	...	8	...	12	12
	Marauwa					...	12	...	12	...	18	18
				Total		2,210	350	...	2,560	...	169	823
				Total for the Circle		13,935	9,770	...	23,705	...	3,079	9,678

CAMP:
The 18th June 1890.

C. BAGSHAWE,
Conservator of Forests, School Circle, N.-W. P. & Oudh.

[Form No. 53.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

TREES FELLED BY GOVERNMENT AGENCY OR PURCHASERS DURING THE YEAR 1889-90.

Divisions.	Trees felled or girdled.		Remarks.
	Description.	Number.	
Dehra Dún ...	Sál	33,106	
	Sain	4,403	
	Shisham	3	
	Tún	19	
	Miscellaneous	112,817	
	Total ...	150,348	
Saháranpur ...	Sál	6,989	
	Sain	100	
	Shisham	5	
	Tún	5	
	Miscellaneous	124,258	
	Total ...	131,357	
Jaunsár	Deodár	5,628	
	Chír	2,820	
	Spruce and silver fir	1,104	
	Oaks	1,542	
	Sál	63	
	Miscellaneous	1,586	
	Total ...	12,803	
	Abstract for Circle.		
	Sál	40,158	
	Sain	4,503	
	Shisham	8	
	Tún	24	
	Plains miscellaneous	237,075	
	Deodár	5,628	
	Chír	2,820	
	Spruce and silver fir	1,104	
	Oaks	1,542	
	Hill miscellaneous	1,586	
	Total ...	294,508	

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

COMPARATIVE ABSTRACT OF TREES FELLED DURING THE YEAR 1889-90.

Description of trees.	Jardinage or selection fellings.								Thinnings.								Clearances.								Grand Total.	
	By Government agency.		By contractors.		By right-holders and grantees.		Total.		By Government agency.		By contractors.		By right-holders and grantees.		Total.		By Government agency.		By contractor.		By right-holders and grantees.		Total.			
	No.	Cubic feet.	No.	Cubic feet.	No.	Cubic feet.	No.	Cubic feet.	No.	Cubic feet.	No.	Cubic feet.	No	Cubic feet	No.	Cubic feet.	No.	Cubic feet.	No.	Cubic feet.	No	Cubic feet.	No.	Cubic feet.	No.	Cubic feet.
Sál ..	102	1,249	59	503	55	275	216	2,027	11,100	50,755	25,653	145,589	...	...	36,753	196,344	...	...	3,189	8,000	..	...	3,189	8,000	40,158	206,371
Sain ..	...	...	...	...	...	...	...	...	352	1,400	4,151	17,017		...	4,503	18,417	...	...	...	...	...	...	...	...	4,503	18,417
Shisham ..	5	53	...	...	...	...	5	53	...	...	3	139	...	...	3	139	...	...	...	..	...	...	...	...	8	192
Tún ..	24	767	...	...	...	...	24	767	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24	767
Deodár ..	3,709	370,900	888	88,800	152	15,200	4,749	474,900	872	1,316	..	...	..	...	872	1,316	...	...	7	35	..	6,992	7	7,027	5,628	483,243
Chír ..	426	34,080	1,978	158,240	416	33,280	2,820	225,600	...	...	...	...	..	...	...	...	...	...	...	..	...	...	...	...	2,820	225,600
Spruce and silver firs ..	534	132,140	22	1,760	608	48,640	1,164	182,540	...	...	...	...	...	...	...	...	...	...	...	...	...	400	...	400	1,164	182,940
Oaks ..	1,241	37,230	60	1,800	241	7,230	1,542	46,260	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,542	46,260
Miscellaneous ..	317	22,190	66	366	87	435	470	22,991	98,736	64,596	131,762	253,140	918	1,249	231,416	318,985	...	4,614	6,775	30,564	...	...	6,775	35,178	238,661	377,154
Total, 1889-90,	6,358	598,609	3,073	251,469	1,559	105,060	10,990	955,138	111,060	118,067	161,569	415,885	918	1,249	273,547	535,201	...	4,614	9,971	38,599	...	7,392	9,971	50,605	294,506	1,540,944
Total, 1888-89,	6,901	471,506	2,943	246,681	1,646	95,104	11,491	813,291	110,176	180,626	105,095	295,360	76	152	215,347	476,138	2,627	35,348	10,034	20,060	392	4,421	20,053	59,829	246,891	1,349,258
Difference. More ..	...	127,103	130	4,788	...	9,956	...	141,847	884	...	56,474	120,525	842	1,097	58,200	59,063	...	...	...	18,539	...	2,971	...	...	47,617	...
Difference. Less ...	543	...	...	...	89	...	501	...	...	62,559	...	...	...	...	...	...	2,627	30,734	63	...	392	...	10,082	9,224	...	191,686

CAMP:
The 18th June 1890.

C. BAGSHAWE,
Conservator of Forests, School Circle, N.-W. P. & Oudh.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

OUTTURN OF TIMBER AND FIREWOOD DURING THE YEAR 1889-90.

Division.	Description of materials.		Outturn in cubic feet.								Remarks.
			Selection fellings.	Clearances.	Thinnings.	Total.	Removed by— Government agency.	Purchasers.	Free grants.	Right-holders.	
			I.—Reserved Forests.								
Dehra Dún.	Timber of sorts ...	... c. ft.	1,452	20	221,811	223,283	38,601	184,682	...	...	
	Ditto (drift) ...	... „	...	10,672	...	10,672	7,765	2,907	...	...	
	Total, Timber ...	... „	1,452	10,692	221,811	233,955	46,366	187,589	...	...	
	Firewood	... c. ft.	...	592,634	214,250	806,884	214,250	353,150	7,500	231,984	
	Ditto (drift) ...	... „	...	131,455	...	131,455	101,740	29,715	...	...	
	Total, Firewood ...	... „	...	724,089	214,250	938,339	315,990	382,865	7,500	231,984	
Saharanpur.	Sál timber	... c. ft.	516	...	45	561	98	463	...	...	
	Ditto poles	... „	...	...	1,613	1,613	1,309	304	...	...	
	Ditto saplings... ...	... „	...	...	283	283	283	...	...	...	
	Tún timber	... „	67	...	...	67	67	...	...	...	
	Sisu ditto	... „	53	...	...	53	53	...	...	...	
	Sain poles	... „	...	...	107	107	...	107	...	...	
	Miscellaneous	... „	...	...	2,092	2,092	...	1,161	931	...	
	Ditto leased	... „	...	...	267	267	...	267	...	...	
	Ditto saplings	... „	...	...	210	210	...	210	...	...	
	Total, Timber ...	... „	636	...	4,617	5,253	1,810	2,512	931	...	
	Firewood	... c. ft.	...	...	85,680	85,680	*5,250	80,430	...	...	* Not yet sold, remaining in the forest.
	Ditto (leased) ...	... „	...	23,450	63,525	86,975	37,800	49,175	...	...	
	Total, Firewood ...	... „	...	23,450	149,205	172,655	43,050	129,605	...	...	
	Deodár trees	... c ft.	104,000	...	...	104,000	...	88,800	1,200	14,000	8,100 c. ft. unremoved.
	Chír trees	... „	191,520	...	...	191,520	...	158,240	...	33,280	
	Rai and morinda trees ...	... „	10,680	...	...	10,680	...	4,760	...	5,920	
	Kail trees	... „	42,720	...	...	42,720	...	...	...	42,720	
	Oak trees	... „	9,030	...	...	9,030	...	1,800	...	7,230	
	Sál and sain trees ...	... „	315	...	...	315	...	40	...	275	
	Miscellaneous trees ...	... „	460	...	...	460	...	25	10	425	
	M. G. deodár sleepers ...	... „	186,170	...	...	186,170	186,140	...	30	...	
	B. G. ditto ...	... „	421	...	...	421	421	...	...	...	
	M. G. deodár pieces ...	... „	104	...	...	104	104	...	...	...	
	Rejected M. G. pieces ...	... „	3,135	...	...	3,135	3,135	...	...	...	
	Deodár scantlings ...	... „	11,544	6,992	...	18,536	11,460	84	...	6,992	
	Ditto ballis ...	... „	...	...	1,286	1,286	1,286	...	...	...	
	Ditto saplings ...	... „	...	35	...	35	...	35	...	...	
	B. G. chír sleepers ...	... „	763	...	...	763	763	...	...	...	

Fir and pine scantlings	...	...	...	33,856	400	...	...	34,256	33,856	...	...	...	400		
Oak scantlings ...	...	...	...	31	...	...	...	31	31	...	...	...	...		
Shikarjas and beams	...	...	...	4,192	...	...	...	4,192	4,192	...	...	...	...		
Miscellaneous pieces	...	...	...	383	...	...	...	383	383	...	...	...	...		
Walnut ...	...	...	...	8	...	...	...	8	8	...	...	...	...		
Tún ...	...	...	...	4	...	...	...	4	4	...	...	...	...		
Kakar ...	...	...	...	30	...	...	30	30	30	...	...	...	...		
Deodár korwas ...	...	...	...	...	...	30	30	30	30	...	...	...	...		
Chir logs ...	...	...	...	...	3	...	...	3	3	...	...	...	...		
Kukat ballis ...	...	...	...	...	...	...	264	264	174	...	90	...	...		
Tham, poles, tore, sticks, korwas and tool handles.	...	...	...	...	...	...	888	888	...	...	670	...	318		
Drift wood pieces (lease)	...	...	...	...	582	...	...	582	454	...	128	...	...		
Boxwood ...	...	...	...	216	...	...	...	216	...	...	216	...	...		
Haldu pieces ...	...	...	...	120	...	...	...	120	...	...	120	...	...		
Seven feet deodár sleepers	...	...	...	2	...	...	...	2	...	2	...	...	...		
Sál ballis ...	...	...	...	...	...	80	...	80	80	...	...	...	...		
Total	...	...	...	599,707	9,009	2,548	610,264	342,556	254,008	1,240	111,560				
Firewood (oak)	...	...	c. ft.	36,474	...	...	36,474	35,270	1,204	...	...				
Ditto (fir) ...	...	...	...	110,265	...	...	110,265	110,265	...	...	...				
Ditto (mixed)	...	...	...	20,270	...	...	20,270	16,130	4,140	...	...				
Ditto (londa)	...	...	...	...	4,614	...	4,614	4,614	...	...	...				
Drift firewood ...	...	...	...	...	26,059	...	26,059	26,059	...	...	...				
Charcoal ...	...	...	...	12,969	...	...	12,969	9,029	3,940	...	...				
Jogna londa ...	...	...	...	...	2,640	...	2,640	...	...	...	2,640				
Firewood (mixed) removed by villagers from Government forest.	...	...	...	...	1,460,000	...	1,460,000	...	...	...	1,460,000				
Kálsi (lease) firewood	...	...	...	...	11,800	...	11,800	...	11,800	...	...				
Ditto (ditto) charcoal	...	...	...	...	821	...	821	...	821	...	...				
Total	...	...	...	179,978	1,506,534	...	1,686,512	201,967	21,905	...	1,462,640				

III.—Protected Forest.

III$_1$.—Unclassed State Forest.

Nil.

Grand Total ...	Timber	...	c. ft.	601,795	18,701	228,976	849,472	290,732	445,069	2,171	111,560	
	Firewood	...	...	179,978	2,254,073	363,455	2,797,506	561,007	534,375	7,500	1,694,624	

Abstract for Reserved Forest.

Deodár trees ...	...	...	c. ft.	104,000	...	...	104,000	...	†88,800	1,800	14,000	† 8,100 c. ft. unremoved.
Ditto scantlings ...	...	...	...	11,544	6,992	...	18,536	11,450	84	...	6,992	
Ditto M. G. sleepers and pieces	...	...	...	189,411	...	...	189,411	189,381	...	30	...	
Ditto B. G. ditto	...	...	...	421	...	...	421	421	...	...	...	
Ditto ballis, korwas, &c. ...	...	...	...	...	35	1,316	1,351	1,316	35	...	...	
Chir trees ...	...	...	...	191,520	...	...	191,520	...	158,240	...	33,280	
Ditto B. G. sleepers	...	...	...	763	...	...	763	763	...	...	...	
Fir and pine trees	...	...	...	53,400	...	...	53,400	...	4,760	...	48,640	
Ditto scantlings	...	...	...	33,856	400	...	34,256	33,856	...	...	400	
Oak trees ...	...	...	...	9,030	...	...	9,030	...	1,800	...	7,230	
Miscellaneous timber of sorts	...	...	...	7,850	11,274	227,660	246,784	53,535	191,230	941	1,018	
Total, Timber	...	...	...	601,795	18,701	228,976	849,472	290,732	445,069	2,171	111,560	
Firewood ...	...	...	c. ft.	167,009	2,253,252	363,455	2,783,716	551,978	529,614	7,500	1,694,624	
Charcoal ...	...	...	...	12,969	821	...	13,790	9,029	4,761	...	...	

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

COMPARATIVE ABSTRACT OF YIELD IN PRODUCE 1889-90.

Description of produce.	1888-89.		1889-90.		Increase.	Decrease.	Remarks.
	Quantity.	Value.	Quantity.	Value.			
		Rs.		Rs.	Rs.	Rs.	
Timber ... ... c. ft.	721,973	299,863	802,015	329,113	29,250	...	
Poles ... ... „	57,801	24,564	37,416	12,297	...	12,267	
Saplings ... ... „	3,639	295	10,041	4,162	3,167	...	
Bamboos ... ... scores.	96,841	12,338	130,884½	16,708	4,370	...	
Firewood ... ... c. ft.	2,549,956	91,869	2,783,716	105,903	14,034	...	
Charcoal ... ... „	7,845	1,739	13,790	2,585	846	...	
Minor produce	...	18,853	...	21,023	2,170	...	
Grazing dues and fodder grass	...	23,954	...	24,520	566	...	
Amount of free-grazing	...	7,838	...	7,836	...	2	
Total ...	...	482,013	...	524,147	54,403	12,269	
				Net increase ...	42,134		

CAMP:
The 18th June 1890.

C. BAGSHAWE,
Conservator of Forests, School Circle, N.-W. P. & Oudh.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH. [Form No. 55.

OUTTURN OF MINOR FOREST PRODUCE DURING THE YEAR 1889-90.

Division.	Description of produce.	Produce removed or utilized.										Remarks.
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
	I.—Reserved Forests.		Rs.		Rs.		Rs.		Rs.		Rs.	
Dehra Dún.	Bamboos	700	5	9,79,680	6,584	...	...	...	...	9,80,380	6,589	
	Grazing animals	...	...	29,008	6,099	...	...	...	*851	29,008	6,950	Amount at half rates from privileged villagers.
	Fodder grass (head loads, &c.)	...	...	1,093	127	...	...	...	...	1,093	127	
	Total	...	...	30,701	6,226	...	...	...	851	30,701	7,077	
	Leases of lime stone	...	...	...	2,417	...	...	...	...	...	2,417	
	„ hides	...	...	...	107	...	...	...	...	...	107	
	„ boulders	...	...	...	30	...	...	...	...	...	30	
	„ minors produce	...	...	...	4,038	...	...	...	...	...	4,038	
	Passes of ditto	—	...	...	1,747	...	...	...	...	...	1,747	
	Total	...	...	...	8,339	...	...	...	...	...	8,339	
	Total, Dehra Dún Division ...	...	5	...	21,149	...	...	...	851	...	22,005	
Sah'ranpur.	Bamboos	...	...	14,100	99	9,260	58	...	...	23,360	157	
	Ditto (leased)	...	...	15,84,800	9,905	...	...	...	...	15,84,800	9,905	
	Total	...	...	15,98,900	10,004	9,260	58	...	...	16,08,160	10,062	

FOREST DEPARTMENT, SCHOOL CIRCLES, N.-W. PROVINCES AND OUDH.

OUTTURN OF MINOR FOREST PRODUCE DURING THE YEAR 1889-90—*(concluded)*.

Division.	Description of produce.	Produce removed or utilized.										Remarks.
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
			Rs.		Rs.		Rs.		Rs.		Rs.	
Saháranpur.	Grazing (animals)	...	...	27,800	6,224	...	...	...	...	27,800	6,224	
	Ditto (lease of Sakumri Fair) ...	...	..	4,200	1,050	...	...	...	...	4,200	1,050	
	Ditto (through Collector)	...	...	41,305	7,956	...	...	...	665	41,305	8,621	
	Fodder grass	...	...	...	22	...	...	...	...	...	22	
	Total	...	...	73,305	15,252	...	...	...	665	73,305	15,917	
	Hides and horns	...	...	...	187	...	...	...	...	...	187	
	Honey and wax	...	...	...	225	...	...	...	...	...	225	
	Stones	...	...	...	262	10,000	83	...	...	...	345	
	Grass	...	...	...	179	...	...	...	...	...	179	
	Leaves	...	...	...	481	...	10	...	...	...	491	
	Gums	...	...	...	825	...	...	...	...	...	825	
	Fencing thorns, &c.	...	...	...	58	...	...	...	...	...	58	
	Kanda and saral	...	...	...	10	...	...	...	...	...	10	
	Fruit	...	...	...	38	...	...	...	...	...	38	
	Chattimala	...	...	...	630	...	...	...	...	...	630	
	Creepers	...	...	...	2	...	...	...	...	...	2	
	Miscellaneous	...	...	...	53	...	...	...	...	...	53	
	Lease of other minor produce	...	...	...	6,775	...	...	...	...	...	6,775	
	Total	...	...	...	9,725	...	93	...	...	...	9,818	
	Total, Saháranpur Division ...	...	...	...	24,981	...	151	...	665	...	25,797	

Jaunsár.	Ringals	...	...	27,450	36	...	...	...	...	27,450	36
	Bamboos	...	...	800	10	...	...	900	11	1,700	21
	Total	...	...	28,250	46	...	...	900	11	29,150	57
	Grazing cattle	...	...	10,973	2,166	...	...	31,900	4,320	42,373	6,486
	Fodder grass (loads)	40	10	224	7	...	...	...	2,000	...	2,007
	Ditto (pulas)	5,067		13,000	8	...	...	...	...	...	18
	Total	...	10	...	2,181	...	...	...	6,320	...	8,511
	Resin ... ... Mds. ...	119¼	477	...	...	...	...	...	...	119¼	477
	Colophony	200	900	...	...	...	...	...	...	200	900
	Turpentines	42¾	678	...	...	...	...	...	...	42¾	678
	Chír and kail tar	7½	30	...	...	...	...	...	...	7½	30
	Other minor produce	...	...	...	271	...	...	...	500	...	771
	Total	...	2,085	...	271	...	...	...	500	...	2,856
	Total, Jaunsár Division ..	...	2,095	...	2,498	...	...	...	6,931	...	11,424
	II.—Protected Forests.										
	Nil.										
	III.—Unclassed State Forests.										
	Nil.										
	Abstract for Reserved Forests										
The Circle.	Bamboos	700	5	26,06,830	16,634	9,260	58	900	11	26,17,690	16,708
	Grazing and fodder grass	...	10	...	23,659	...	...	...	7,936	...	31,505
	Minor produce	...	2,085	...	18,335	...	93	...	500	...	21,013
	Total	...	2,100	...	58,628	...	151	...	8,247	...	69,226

CAMP :
The 18th June 1890.

C. BAGSHAWE,
Conservator of Forests, School Circle, N.-W. P. & Oudh.

[Form No. 56.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1889-90.

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Balance in hand on 1st April 1889.				
Dehra Dún ... Sal ballas, ballis, tors, &c. ...	386	1,220	1,362	3,298
Dehra Dún ... Sissu logs, kukat tarans, drift, logs, &c.	976	2,078		
Dehra Dún ... Firewood	...	99,500	...	1,30,190
Dehra Dún ... Drift wood	...	30,690		
Saháranpur ... Sál poles and saplings ..	1,430	1,807	1,430	1,807
Jaunsár ... Metre gauge, deodár sleepers .	73,016	120,286	89,914	142,150
Jaunsár ... Miscellaneous timber, &c. ...	16,898	21,864		
Jaunsár ... Firewood and charcoal . .	690½	40,762	690½	40,762
Jaunsár ... Grass loads and pulas ..	513	...	513	
Jaunsár ... Resin ... ... Mds.	13½	...	13½	
Jaunsár ... Lime ... ... ,,	...	50	...	50
Total balance, Timber	...	...	92,766	147,255
Total balance, Firewood and charcoal ...	...	...	690½	170,952
Total balance, Grass loads, &c.	...	...	513	
Total balance, Resin ... ... Mds.	...	...	13½	
Total balance, Lime ... ... ,,	...	...	...	50
Received from the Forests in Depôts.				
Sál ballas, tors poles, saplings, &c.	19,918	40,291		
Tun and sissu timber	10	120		
Metregauge and broad gauge deodár sleepers ...	119,746	186,561		
Deodar, fir, rai, oak, chír, sál, &c., timber ..	44,993	55,541	184,667	282,513
Firewood and charcoal	2,307	369,243	2,307	369,243

Particulars.	No. or quantity.	Cubic feet.	Total of each heads. No. of quantity.	Total of each heads. Cubic feet.
Removed by purchasers from depôts.				
Sál ballas, tars, poles, saplings, &c.	16,891	34,459	...	...
Sál and shisham logs and gats, and deodár fir, pine, rai, kail, tún, chír, &c., timber.	29,786	37,842	...	...
Metre gauge deodár sleepers	110,490	1,73,417	157,167	2,45,718
Firewood and charcoal	929	3,32,622	929	3,32,622
Fodder, grass and pulas	587	...	587	...
Colophony ... ... Mds.	197	..	197	...
Turpentine ... ... ,,	17-38	...	17-38	...
Sold locally.				
Firewood and charcoal	...	58,115	...	58,115
Drift timber sold locally.				
Drift karris, bargas, logs, &c.	1,698	9,017	1,698	9,017
Firewood	...	117,444	...	117,444
Lost or written off.				
Metregauge and broad gauge deodár sleepers, and sál, kail, rai, deodár, fir, &c , timber.	12,377	19,475	12,377	19,475
Firewood	...	29,785	...	29,785
Turpentine ... ... seer.	25	...	25	...
Converted in depôts.				
Metregauge and broad gauge deodár sleepers, and chír, &c., scantlings.	162	762	162	762

(xxxx)

Fodder grass and pulas	5,107	...	5,107	
Resin ... ... Mds.	607½	...	607½	
Colophony ... ... "	200	...	200	
Turpentine ... ... "	42⅜	...	42⅜	
Chír and kail tar ... ... "	7½	...	7½	
Lime	...	22	...	22
Departmental collection and local sale of drift timber from the Ganges and Jumna.				
Drift logs, karris, bargas, firewood, &c. ...	1,494	8,219	1,494	8,219
Firewood (drift)	...	128,399	...	128,399
RECEIVED FROM THE FORESTS FOR DEPARTMENTAL USE.				
Bamboos	700	...	700	...
RECEIVED FROM THE FORESTS AND SOLD LOCALLY				
Firewood and charcoal	...	58,115	...	58,115

USED BY DEPARTMENT.				
Ballas, ballis, tors and sál, tún, sissu, deodár, oak, kail, &c., timber.	8,856	12,311	8,856	12,311
Firewood	...	1,705	...	1,705
Bamboo	700	...	700	
Turpentine ... ... Seers	10	...	10	
Kail and chír tar ... ... Mds.	7½	...	7½	
Lime	...	72	...	72
TRANSFERRED TO OTHER DIVISION.				
Resin ... ... Mds.	30	...	30	
BY DISTILLATION.				
Resin ... ... Mds.	487¾	...	487¾	..
BALANCE AT CLOSE OF THE YEAR.				
Dehra Dún Division.				
Sál ballas, tors and drift logs, karris, &c. ..	2,809	4,865	2,809	4,865
Firewood	...	1,32,065	...	132,065
SAHÁRANPUR DIVISION.				
Sál poles and saplings	1,240	1,637	1,240	1,637
JAUNSÁR DIVISION.				
Metregauge deodár sleepers	69,861	1,12,684		
Broad gauge deodár sleepers and fir, rai, deodár, kail, sal, oak, tun, &c., timbers.	24,697	31,518		
			94,558	144,202
Firewood and charcoal	2,068½	54,973	2,068½	54,973
Fodder grass and pulas	5,033	...	5,033	...
Resin ... ... Mds.	103	...	103	...
Colophony ... ... "	3	...	3	...
Turpentine	Mds. s. c. 23 22 0	...	Mds. S. c. 23 22 0	

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1889-90—(*concluded*).

Particulars.	No or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Grand Total ... Timber	...	...	278,867	437,987
Firewood and charcoal ...	...	...	2,997½	726,709
Bamboos	...	...	700	...
Fodder grass and pulas ...	...	...	5,620	...
Resin ... ... Mds.	...	...	620¾	...
Colophony ... „	...	...	200	...
Turpentine ... „	...	...	42½	...
Chir and kail tar ... „	...	...	7½	...
Lime	...	...	...	72

Abstract.

TIMBER INCLUDING DRIFT.

Balance in hand at commencement of the year ...	...	147 255	
Received from the forests during the year ...	...	282,513	
Ditto the departmental collection of drift timber from the Ganges and Jumna.	...	8,219	437,987

FIREWOOD AND CHARCOAL.

Balance at commencement of the year ...	...	170,962	
Received from the forests during the year ...	...	369,243	
Ditto the departmental collection of drift wood from the Ganges and Jumna.	...	128,399	
Received from the forests and sold locally ...	...	58,115	726,709

Particulars.	No or quantity.	Cubic feet.	Total of each head. No. for quantity.	Total of each head. Cubic feet.
Total balances, Timber	...	...	28,607	150,704
Firewood and charcoal ...	...	...	2,068½	187,038
Fodder grass and pulas ..	...	...	5,033	...
Resin .. ... Mds.	...	...	103	...
Colophony ... „	...	...	3	...
Turpentine ...	...	...	Mds. a. c. 23 22 0	...
Grand Total ... Timber	...	...	278,867	437,987
Firewood and charcoal ...	...	...	2,997½	726,709
Bamboos	...	...	700	...
Fodder grass and pulas ...	...	...	5,620	...
Resin ... ... Mds.	...	...	620¾	...
Colophony ... „	...	...	200	...
Turpentine ... „	...	...	42½	...
Chir and kail tar ... „	...	...	7½	...
Lime	..	...	...	72

Removed by purchasers from depôts ...	...	243,718	
Sold locally (drift timber) ...	...	9,017	
Lost or written off	...	19,475	
Transferred to other classes ...	...	762	
Used by department	...	12,311	
Balance at close of the year ...	...	150,704	437,987

Removed by purchasers from depôts ...	...	332,622	
Sold locally	...	58,115	
Ditto (driftwood)	...	117,444	
Lost or written off	...	29,785	
Used by department	...	1,706	
Balance at close of the year ...	...	187,038	726,709

					Bamboos.								
Received from the forest for departmental use	...		700	...		700	...	Used by Department	...	...	...	700	...	700	
					Miscellaneous produce.								
					Grass loads and pulas.								
Balance at close of the year	...	...	513	...				Removed by purchasers from depôts	...	...		587	...		
Received from the forest during the year	..		5,107	...		5,620	...	Balance at close of the year	...	..		5,033	...	5,620	
					Resins.								
Balance at commencement of the year	...		13½	...				Transferred to other divisicn	...	Mds.		30	...		
Received from the forest during the year	...		607½	...		620¾		By distillation	...	...	...	487½	...		
								Balance at close of the year	...	...		103	...	620¾	
					Colophony.								
Received from the forests in depôt	...	Mds.	200	...		200	...	Removed by purchasers from depôts	...	Mds.		197	...		
								Balance at close of the year	...	...		3	...	200	
					Turpentine.								
								Removed by purchasers from depôts	...	...		17-38	...		
Ditto	ditto	...	Mds.	42⅜	...	42⅜	...	Lost or written off	...	...	...	25	...		
								Used by department	...	...	seers.	10	...		
								Balance at close of the year	...	...	Mds.	23-22	...	42⅜	
					Chir and kail tar.								
Ditto	ditto	...	Mds.	7⅓	...	7⅓	...								
					Lime.								
								Used by Department	...	...	Mds.	7⅓	...	7⅓	
Balance at commencement of the year	...	...		50											
Received from the forests in depôts ...	...	...		22	...	72		Ditto	...	...	...	...	72	...	72

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

ABSTRACT OF STOCK ACCOUNT, 1889-90.

Description of materials, &c.	On hand at commencement of the year.										On hand at close of the year.										Increase or decrease in value on 31st March 1890.				
	Dehra Dún.		Saháran-pur.		Jaunsár.		Direc-tion.		Total.		Dehra Dún.		Saháran-pur.		Jaunsár.		Direc-tion.		Total.						
	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.	Dehra Dún.	Saháranpur.	Jaunsár.	Direction.	Total.
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Timber ...	3,298	1,099	1,807	678	142,150	99,086	...	...	147,255	1,00,863	4,865	1,938	1,637	614	144,202	97,827	...	...	150,704	1,00,279	+739	−64	−1,259	...	−584
Firewood and charcoal.	130,190	4,005	...	...	40,762	7,767	...	...	170,952	11,772	132,065	5,811	...	...	54,973	10,627	...	...	187,038	16,438	+1,806	...	+2,860	...	+4,666
Minor produce ...	...	...	...	...	...	65	...	...	...	65	...	...	...	...	...	812	...	...	...	812	...	...	+747	...	+747
Total ...	...	5,104	...	678	...	1,06,918	...	...	...	1,12,700	...	7,649	...	614	...	1,09,266	...	...	...	1,17,529	+2,545	−64	+2,348	...	+4,829
Live stock ...	...	2,800	...	1,200	...	...	...	1,700	...	5,700	...	1,700	...	1,200	...	...	...	2,800	...	5,700	−1,100	...	...	+1,190	...
Dead stock including building, furniture, &c.	...	24,445	...	13,155	...	48,493	...	39,363	...	1,25,455	...	24,496	...	14,012	...	49,415	...	39,450	...	1,27,372	+57	+857	+922	+87	+1,917
Total ...	...	27,245	...	14,355	...	48,493	...	41,063	...	1,31,155	...	26,195	...	15,212	...	49,415	...	42,250	...	1,33,072	−1,049	+857	+922	+1,187	+1,917
GRAND TOTAL ...	...	32,349	...	15,033	...	1,55,411	...	41,063	...	2,43,855	...	33,844	...	15,826	...	1,58,681	...	42,250	...	2,50,601	+1,496	+793	+3,270	+1,187	+6,746

CAMP:
The 18th June 1890.

C. BAGSHAWE,
Conservator of Forests, School Circle, N.-W. P. & Oudh.

[Form No. 57A.

FOREST, DEPARTMENT SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPÔTS FOR THE YEAR 1889-90.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value		Remarks.
	No.	C ft.	Value.	No.	C. ft.	Value.	In favour of the year.	Against the year.	
Dehra Dun Division.			Rs.			Rs.	Rs.	Rs.	
Sál ballas and tors	326	980	330	2,268	4,013	1,704	1,374	...	
Do. ballis...	9	27	9	...	...	...	...	9	
Do. gats	51	204	68	...	...	...	...	68	
Kukat ballis and tarans ...	600	600	203	408	408	47	...	156	
Sissu logs...	90	287	95	...	...	...	...	95	
Drift logs and pieces	210	1,088	362	37	331	74	...	288	
Ditto scantlings	67	94	32	36	53	13	...	19	
Fire-wood	...	99,500	3,128	...	109,565	4,821	1,693	...	
Drift firewood	...	30,690	877	...	22,500	990	113	...	
Total ...	...	...	5,104	...	...	7,649	3,180	635	
Saharanpur.									
Sál timber	19	45	5	22	45	17	12	...	
Do poles	1,075	1,121	545	915	1,309	491	...	54	
Do. saplings	330	341	128	303	283	106	...	22	
Total ...	...	..	678	...	...	614	12	76	

[Form No. 57A.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPÔTS FOR THE YEAR 1889-90—(*concluded*).

Description of timber and other produce.	On hand at commencement of the year.			On hand at the close of the year.			Difference of value.		Remarks.
	No.	C ft.	Value.	No.	C.ft.	Value.	In favour of the year.	Against the year.	
Jaunsar Division.			Rs.			Rs.	Rs.	Rs.	
Broad gauge deodár sleepers ...	6	20	9	50	155	75	66	...	
Metre ditto	73,010	120,286	82,143	69,861	112,684	78,593	...	3,550	
Deodár scantlings	8,865	11,010	13,207	7,488	8,123	11,232	...	2,065	
Broad gauge chír sleepers ...	18	66	14	42	126	31	17	...	
Pine, fir and tun shikanjas ...	452	2,133	226	289	1,281	144	...	82	
Metre gauge, &c., pieces ...	236	157	118	367	245	183	65	...	
Miscellaneous	1,905	309	238	2,152	357	269	31	...	
Sál ballis	12	12	1	80	80	7	6	...	
Pine and fir scantlings ...	4,673	6,119	2,336	11,439	17,075	5,719	3,383	...	
Deodár ballis	15	16	30	233	312	466	436	...	
Rai sleepers and beams ...	76	152	10	139	278	17	7	...	
Do. ballis...	5	12	5	4	8	4	...	1	
Kail sleepers	290	979	363	8	24	6	...	357	
Oak scantlings	24	15	12	22	15	11	...	1	
Drift logs	1	8	2	...	...	...	...	2	
Walnut sleepers, &c.	41	82	62	42	83	63	1	...	
Tun ditto	73	140	91	72	136	90	...	1	
Kakar ditto	30	40	45	81	67	122	77	...	
Chír logs	40	535	49	...	...	...	...	49	
Kukat ballis	3	3	1	7	14	2	1	...	
Deodár posts and korwas ...	103	14	13	104	21	13	...	...	
Seven feet deodár sleepers ...	21	42	21	2	4	2	...	19	
Rejected deodár ditto ...	...	...	...	2,076	3,114	778	778	...	
Oak and fir firewood	...	37,213	7,231	. .	46,458	9,030	1,799	...	
Firewood (loads)	690½	1,381	129	2,068½	4,137	776	647	...	
Charcoal	...	2,168	407	...	4,378	821	414	...	
Fodder grass loads and pulas ...	23	...	2	5,033	...	10	8	...	
Pine resin ... Mds. ...	13½	...	53	103	...	412	359	...	
Colophony ... „ ...	...	...	...	3	...	13	13	...	
Turpentine ... „ ...	...	...	...	2,322	...	377	377	...	
Lime ... ... „ ...	...	50	10	...	...	...	...	10	
Total ...	...	...	1,00,918	. .	...	1,09,266	8,485	6,137	
GRAND TOTAL FOR THE CIRCLE ...	...	...	1,12,700	...	...	1,17,529	11,677	6,848	

Net difference in favour of the year, Rs. 4,829.

CAMP:
The 18th June 1890.

C. BAGSHAWE,
Conservator of Forests, School Circle, N.-W. P. & Oudh.

[Form No. 57B.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1889-90.

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.		Remarks.
	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.	
Direction Division.		Rs.		Rs.	Rs.	Rs.	
Office furniture	50	723	53	733	10	...	
Tents	6	418	6	418	...	...	
Buildings and building materials	13	38,064	13	38,064	...	...	
Miscellaneous	23	158	26	235	77	...	
Elephant	1	1,700	1	2,800	1,100	...	
Total ...	...	41,063	...	42,250	1,187	...	
Dehra Dun Division.							
Surveying and other instruments	69	227	67	217	...	10	
Tools	1,763	986	1,697	916	...	70	
Office furniture	426	897	430	888	...	9	
Tents	16	166	14	137	...	29	
Buildings and building materials	108	21,377	107	21,551	174	...	
Miscellaneous	501	791	500	786	...	5	
Elephant	1	2,800	1	1,700	...	1,100	
Total ...	...	27,244	...	26,195	174	1,223	
Saharanpur Division.							
Surveying and other instruments	16	78	15	79	6	...	
Machinery	13	42	13	42	...	...	
Tools	800	401	825	371	...	30	
Office furniture	178	960	187	1,258	298	...	
Tents	6	452	7	481	29	...	
Buildings and building materials	42	9,824	42	10,311	487	...	
Miscellaneous	541	1,403	...	...	...	...	
Elephant	1	1,200	1	1,200	...	...	
Total ...	...	14,355	...	15,212	887	30	
Jaunsar Division.							
Surveying and other instruments	53	431	54	430	...	1	
Machinery	11	154	17	152	...	2	
Tools	2,662	3,266	2,603	3,062	...	204	
Office furniture	64	532	63	506	...	26	
Tents	8	244	9	262	18	...	
Buildings and building materials	382	42,032	417	43,823	1,191	...	
Miscellaneous	13,369	1,284	13,336	1,180	...	54	
Total ...	...	48,493	...	49,415	1,209	287	
GRAND TOTAL ...	...	1,31,155	...	1,33,072	3,457	1,540	

Net difference in favour of the year, Rs. 1,917.

CAMP: *The 18th June* 1890.

C. BAGSHAWE,
Conservator of Forests, School Circle, N.-W. P. & Oudh.

FOREST DEPARTMENT, NORTH-WESTERN PROVINCES AND OUDH, SCHOOL CIRCLE. [Form No 58.

SUMMARY OF REVENUE OF THE DIFFERENT DIVISIONS DURING 1889-90.

Budget Heads.	Direction.	Debra Dun Division.	Saharanpur Division.	Jaunsar Division.	Total Division.
RECEIPTS.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the Forests by Government Agency—					
a. Timber	...	8,295 1 9	672 8 0	1,99,739 10 0	2,08,707 3 9
b. Firewood and charcoal	...	5,601 15 7	1,355 0 0	27,484 1 1	34,441 0 8
c. Bamboos	...	...	...	...	...
d. Sandal wood	...	...	...	...	...
e. Grass and other minor produce	...	...	...	...	...
II.—Timber and other produce removed from the Forests by consumers or purchasers—	...	...	...	1,528 1 3	1,528 1 3
a. Timber	...	55,532 6 8	614 9 9	25,902 2 3	82,049 2 8
b Firewood and charcoal	...	7,062 14 6	3,573 2 6	777 9 9	11,413 10 9
c. Bamboos	...	6,583 13 8	10,003 9 3	45 10 6	16,633 1 5
d. Grazing and fodder grass	...	7,141 14 8	18,458 13 11	2,181 5 6	27,782 2 1
e. Other minor produce	...	7,803 12 7	10,135 7 0	271 4 0	18,210 7 7
III.—Drift and waif wood and confiscated forest produce	...	6,858 2 1	...	796 11 8	7,654 13 9
IV.—Revenue from Forests not managed by Government—					
a. Duty on foreign timber and other forest produce	...	...	...	18,746 13 0	18,746 13 0
b. Revenue from shared and private forests	...	...	...	...	...
V.—Miscellaneous—					
a. Fines and forfeitures	...	...	36 5 3	2 0 0	38 5 3
b. Refunds	...	135 11 4	250 0 0	0 8 0	386 3 4
c. Other sources	633 4 5	222 14 3	275 9 6	3,937 5 8	5,069 1 10
Total, Receipts	633 4 5	1,05,238 11 1	45,375 1 2	2,81,413 2 8	4,32,660 3 4

(xxxiv)

A.—CONSERVANCY AND WORKS

I —Timber and other produce removed from the Forests by Government Agency—					
a Timber	...	...	4,573 7 5	329 7 0	91 014 13 0	95 917 11 5
b Firewood and charcoal		...	1,156 12 7	534 6 0	15 815 14 1	17 507 0 8
c Bamboos						
d Sandal wood	..					
e Grass and other minor produce					2,113 3 8	2,113 3 8
II —Timber and other produce removed from the Forests by consumers or purchasers		...	1 894 7 10	226 12 3		2 121 4 1
III —Drift and waif wood and confiscated forest produce			3,959 7 5		315 7 2	4,274 14 7
IV —Revenue from forests not managed by Government—						
a Duty on foreign timber and other forest produce			..		3 339 12 1	3,339 12 1
b Revenue from shared and private forests			...			
V —Rent of leased forests and payments to shareholders in Forests managed by Government		..			11,150 0 0	11,150 0 0
VI —Live stock, stores, tools and plant—						
a Purchase of cattle						
b Feed and keep of cattle		549 7 6	606 0 10	579 9 1		1 735 1 5
c. Purchase of stores, tools and plant	...	87 0 9	117 0 10	475 12 9	554 6 3	1,234 4 7
VII —Communications and Buildings—						
a Roads and bridges		0 15 0	2,385 10 11	257 9 8	7 525 9 2	10,169 12 9
b Buildings		437 0 8	2,099 2 2	1,148 15 6	4,214 2 2	7,899 4 6
c Other works		50 2 10	39 7 9	79 7 6	335 14 3	505 0 4
VIII —Demarcation, improvement and extension of forests—						
a Demarcation		..	278 13 1	457 11 9	596 15 0	1 333 7 10
b Compensation for land and rights					62 6 4	62 6 4
c Surveys and working plans	...	163 12 0			3 108 0 0	3,271 12 0
d Sowing and planting	..		177 4 1	97 3 9	1 792 6 9	2 066 14 7
e Protection from fire			3 167 15 7	2,438 8 2	1,371 8 0	6,977 15 9
f Other works			3,031 7 10	90 6 2	1 781 13 11	5,403 11 11
IX —Miscellaneous—						
a Refunds			9 8 0		3,594 4 0	3,533 12 0
b Law charges				43 10 0	20 0 0	63 10 0
c Other charges		472 6 3	681 2 9	107 13 0	489 14 9	1,801 4 9
Total A—Conservancy and Works		1 760 13 0	24,677 13 1	6,917 4 7	1,49,126 6 7	1,82,482 5 3

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, SCHOOL CIRCLE

SUMMARY OF EXPENDITURE OF THE DIFFERENT DIVISIONS DURING 1889-90.

Budget Heads.	Direction.	Dehra Dún Division.	Saháranpur Division.	Jaunsár Division.	Total.
B.—ESTABLISHMENT.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Salaries—					
a. Conservators	22,792 0 3	...	...	...	22,792 0 3
b. Superior officers	2,250 0 0	7,147 14 3	4,000 0 0	9,266 2 1	22,664 0 4
c. Subordinate forest and depôt establishments	...	8,529 9 9	6,342 1 9	6,886 4 7	21,758 0 1
d. Office establishments	2,722 4 0	8,136 3 1	1,411 2 7	2,112 1 6	8,381 11 2
e. Deputation and special allowances	131 15 4	...	...	...	131 15 4
II.—Travelling Allowances—					
a. Conservators	2,120 9 6	...	...	...	2,120 9 6
b. Superior officers	536 0 6	878 9 6	726 9 6	705 8 0	2,846 11 6
c. Subordinate forest and depôt establishments	...	1,014 9 10	437 2 6	1,176 7 2	2,628 3 6
d. Office establishments	76 11 4	100 10 9	95 13 4	26 7 0	299 10 5
III.—Contingencies—					
a. Stationery	...	45 5 9	48 2 9	72 3 9	165 12 3
b. Carriage of tents and records	176 13 2	333 13 8	299 14 10	214 11 9	1,025 5 5
c. Rents, rates and taxes	92 12 9	360 0 0	28 14 0	36 15 9	518 10 6
d. Pay of police guards	...	...	...	...	...
e. Official postage	121 13 0	104 14 0	131 12 0	126 9 6	485 0 6
f. Sundries	1,204 9 7	476 11 9	214 6 3	908 8 7	2,804 4 2
Total B.—Establishments ...	32,225 9 5	21,128 6 4	13,735 15 6	21,531 15 8	88,621 14 11
Grand Total of Expenditure ...	33,936 6 5	45,806 3 5	20,653 4 1	1,70,658 6 3	2,71,104 4 2

Calcutta:
The 3rd June 1890.

J. BRIDGNELL,
Chief Supdt. in charge (Forests), Account Branch.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

ACCOUNT CURRENT FOR THE YEAR 1889-90.

Dr. **Cr.**

	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
To Cash Balance	...	...	*By Expenditure as per Annual Summary Form No.* 58 ...	...	2,71,104 4 2
„ *VIII—Assessed Taxes—*					
Income Tax—Deductions from salaries	...	1,366 12 3	„ *Deposits*	...	2,640 0 0
„ *Revenue as per Annual Summary Form No.* 58	...	4,32,660 3 4	„ *Forest Cash Remittances, Local—*		
„ *Service Funds—*			Remittances to Treasuries	2,13,488 3 0	
Civil Fund—Ordinary (Bengal)	...		Inter-divisional Transfers	730 6 1	2,14,218 9 1
Ditto Additional (do.)	...		„ *Advances Recoverable*	...	1,51,163 3 3
Military Fund (Bengal)	...				
Ditto (Madras)	134 6 3		„ *Suspense*	...	
Ditto Orphan Fund (Bengal)	...		„ *Account Current (other Governments)—*		
Uncovenanted Service Family Pension Fund (Bengal) ...	...		Remittances to the Government of India	334 5 6	
General Family Pension Fund	...		Ditto ditto Panjáb	1,194 5 3	
Hindu Family Annuity Fund	...	134 6 3	Ditto ditto Assam	1,681 4 6	3,209 15 3
„ *Deposits*	...	2,260 0 0			
„ *Forest Cash Remittances, Local—*				1,97,987 13 11	
Forest cheque drawn	2,59,515 10 9				
Inter-divisional Transfers	292 6 1	2,59,808 0 10	„ *Inter-departmental Transfers—*		
„ *Advances recoverable*	...	1,53,873 3 7	Public Works Department, State Railways	1,69,856 5 0	
„ *Suspense*	...		Ditto ditto, ordinary branches... ...	28,131 8 11	
„ *Account Current (other Governments)—*				1,97,987 13 11	
Remittances from Government of India to Government, North-Western Provinces and Oudh.	5,227 8 11	5,227 8 11			
„ *Inter-departmental Transfers—*			Military Department (Bengal)	23,906 6 6	
Public Works Department (Ordinary Branches) ...	6,726 8 6		Civil Department	...	
Military Department	...		Miscellaneous	476 12 0	2,22'371 0 5
Civil Department—					
Survey of India	193 12 0		*Account Current with Foreign States—*		
Mathematical Instrument Department	6 14 0		Berar Suspense Accounts	...	22 8 6
Miscellaneous	472 3 0				
	672 13 0	9,399 5 6	*Cash balance*	...	
Total	...	8,64,729 8 8		...	8 64,729 8 8

CALCUTTA:
The 3rd June 1890.

J. BRIDGNELL,
Chief Supdt. in charge, Forest Account Branch.

[Form No. 60.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

REVENUE RECEIVED AND OUTSTANDINGS ON ACCOUNT OF REVENUE DURING 1889-90.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Direction ...	Sale proceeds of timber and other forest produce.	...	633 4 5	633 4 5	633 4 5	...
Dehra Dún ...	Ditto ditto ditto ...	16,396 7 0	1,02,445 9 1	1,18,842 0 1	1,05,238 11 1	13,603 5 0
Saháranpur ...	Ditto ditto ditto ...	3,952 6 11	41,888 2 7	45,840 9 6	45,375 1 2	465 8 4
Jaunsár ...	Ditto ditto ditto ...	32,021 14 11	2,67,344 4 2	2,99,366 3 1	2,81,413 2 8	17,953 0 5
Total ...	...	52,370 12 10	4,12,311 4 3	4,64,682 1 1	4,32,660 3 4	32,021 13 9

[Form No. 61.

OUTSTANDINGS AND LIABILITIES ON ACCOUNT OF CONTRACTORS AND DISBURSERS FOR 1889-90.

Division.	Department Debtor.			Department Creditor.			Balance due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (outstandings).	By Department (liabilities).
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Direction...	...	908 13 7	908 13 7	37 10 3	1,036 0 2	1,073 10 5	171 4 10	6 8 0
Dehra Dún,	1 5 3	23,006 1 9	23,007 7 0	2,972 11 10	22,336 0 4	25,308 12 2	2,242 10 5	1 5 3
Saháranpur,	...	7,121 14 5	7,121 14 5	330 1 3	7,287 4 4	7,623 5 7	501 7 2	...
Jaunsár ...	...	1,22,776 5 10	1,22,776 5 10	23,956 13 6	1,20,503 14 5	1,44,460 11 11	21,684 6 1	...
Total ...	1 5 3	1,53,878 3 7	1,53,874 8 10	27,303 4 10	1,51,163 3 3	1,78,466 8 1	24,599 12 6	7 13 3

J. BRIDGNELL,
Chief Supdt. in charge, Forest Acct. Branch.

[Form No. 62.

FINANCIAL RESULTS OF THE YEAR 1889-90.

Division.	Timber and other produce removed from the forest by Government agency.		Other revenue.		Formation, protection and improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Dehra Dún ...	20,755	12,274	84,484	10,817	22,716	1,05,239	45,807
Saháranpur ...	2,027	2,055	43,348	6,135	11,863	45,375	20,053
Jaunsár ...	2,29,548	1,22,069	51,805	5,687	42,902	2,81,413	1,70,658
Direction ...	...	11,329	633	11,329	11,328	633	33,986
Total ...	2,52,330	1,48,027	1,80,380	33,968	88,809	4,32,660	2,70,104

CAMP:
The 18th June 1890.

C. BAGSHAWE,
Conservator of Forests, School Circle, N.-W. P. and Oudh.

ORDERS OF GOVERNMENT.

No. $\frac{763F.}{168A-9}$ of 1890.

RESOLUTION.

REVENUE (FORESTS) DEPARTMENT.

Dated Naini Tal, the 23rd October 1890.

READ—

Annual Progress Reports of the Administration of the Forest Department, North-Western Provinces and Oudh, for the year ending 31st March 1890.

OBSERVATIONS.—The 10th of July has now been prescribed as the latest date on which the Circle reports should be submitted to Government. The report of the Central Circle alone bears an earlier date, the 4th of July; that for the Oudh Circle is dated the 4th of August, and the School Circle report itself is not dated, but the letter forwarding the report is dated the 18th June: whereas some of the appendices and forms are only dated the 16th July. The chief delay has occurred in printing the reports, which were not received from the Press till the 29th September 1890.

2. The Central Circle remained till the end of the year under Mr. C. Bagshawe, Conservator. He was however transferred to the School Circle at the end of March, when Lieutenant-Colonel Bailey went on leave; he was succeeded by Mr. S. Eardley-Wilmot, Officiating Conservator, by whom the annual report has been submitted. The Oudh Circle remained under the charge of Captain Wood, with the exception of seven weeks, during which Captain Wood was on privilege leave, when Mr. Ponsonby officiated for him. Lieutenant-Colonel Bailey, R.E., held charge of the School Circle during the greater portion of the year, but Mr. McA. Moir was in charge from the 11th of June till the 22nd August, and Lieutenant-Colonel Van Someren from the 24th of August till the 23rd of November. Mr. Bagshawe, who succeeded Lieutenant-Colonel Bailey on the 24th of March, has submitted the annual report.

3. *Area.*—The areas of the reserved forests in square miles at the beginning and the end of the year are compared in the margin. In the Central Circle 81 square miles were added during the year and 87 square miles were excluded. The decrease is almost entirely due to the revision of areas by the Forest Survey Branch. The increase is due partly to revision and partly to fresh areas having been gazetted reserved forests during the year; in the latter are included the Gagar-Ninglat forests with an area of 37 square miles: 109 square miles in the Dhabka, Dechauri, Fatehpur and Khurpa Tal forests were not gazetted reserved forests till the year under report, but they had already been included in the forest areas of previous years. In addition, notifications have issued preparatory to the reservation of 141 square miles, and the settle-

Circles.	1st April 1889.	31st March 1890.
	Sq. miles.	Sq. miles.
Central	1,591	1,585
Oudh	1,203	1,203
School	801	802

ments are progressing. The most important of the new reserves are the Kaludanda forests, the reservation of which has been rendered necessary by their neighbourhood to the new cantonment, and 87 square miles in the Bánda Division, which have hitherto remained unclassed. The Airidco forest, which had been placed in the charge of the District Officer, has since the close of the year reverted to the management of the Forest Department to assist the fuel supply of the Ránikhet Cantonment. There has been no change in the area of the Oudh Circle, but proposals were under consideration for further consolidating the Government forests, and by means of exchanges to completely separate the Government forests from those belonging to private owners. The area in square miles of the reserved forests, including leased forests in the School Circle, remained practically unchanged, there being only a nominal increase of 423 acres due to a re-calculation of the area of the Ranigadh forest.

4. Besides the reserved forests, there are in the Central Circle 67 square miles of protected forests in Naini Tal and Lalitpur, and 118 miles of unclassed State forests in the Bánda district. In the School Circle there are also 13 square miles of unclassed State forests.

5. *Boundaries.*—Rupees 6,106 were expended on the maintenance of boundary lines. In the Central Circle the charges under this head amounted to Rs. 2,250. The boundaries are said to be in good order. The expenditure was heaviest in the Jhánsi Division, where temporary pillars were erected and boundaries corrected, to facilitate the progress of the Survey Department at work there. In the Oudh Circle Rs. 2,523 were expended; nearly 46 miles of new ditching was completed, and all the boundaries were inspected and cleared. The Nepal authorities have again failed to clear the neutral strip on their side of the boundary where it adjoins the Bahraich and Gonda districts; and the Government forests remain in considerable danger, the spreading of fires from the Nepál forests having now become a matter of annual recurrence. The matter has formed the subject of further correspondence with the Government of India. In the School Circle there was an expenditure of Rs. 1,333 on the maintenance of the forest boundary lines. In the Jaunsár Division there were several disputes pending, concerning the boundary between the Government forests and the Native States of Jubal and Taroche: the disputed points were, with the concurrence of the Panjáb Government, referred to a joint commission, consisting of the Superintendent of Dehra Dún and the Superintendent of Hill States: after much delay they have submitted their report, which is under the consideration of the Local Government.

6. *Surveys, Working Plans, &c.*—The expenditure under this head during the past and previous year is shown in the marginal statement. In the Central Circle the survey of the forests in the Jhánsi Division was undertaken by Colonel Sandeman of the Survey of India, who also carried out a

Circle.	1888-89.	1889-90.
	Rs.	Rs.
Central	230	1,786
Oudh	7,676	621
School	276	3,272

traverse survey of 144 square miles of forest in the Lalitpur Division; it is anticipated that the areas determined by this survey will show a large increase over the estimates which have been hitherto accepted. In the School Circle the expenditure of Rs 3,272 includes Rs. 1,551 for the survey of the Tehri-Garhwál leased forests. In the Central Circle there are now five permanent working plans in addition to three temporary plans; the only plan in this Circle under preparation during the year was that for the Kothri forest. It has been completed and the work of the year regulated by it, but it has been delayed in the Press, and has not yet been submitted for orders. In this Circle there still remain considerable areas of forests for which working plans would be most advantageous, but the Divisional Officer, with his yearly increasing work, has not sufficient leisure to devote to their preparation, and an officer will be specially deputed to the Circle in the coming winter for the completion of plans in the Garhwál forests. The excellent results of the closure of a portion of the bamboo forests in the Central Circle, and of the improvement thinnings started in the Horai sál forests, show that a more systematic working of the forests, on lines to be laid down in carefully worked out plans, would result in improving both the forests and the revenue. In the Oudh Circle the necessity of a special officer was proved by the inability of Captain Wood to complete the Kheri and Gorakhpur plans, which have now been a very long time under preparation. The Kheri plan, which, it was said in the last Review, had been completed, was returned by the Inspector-General of Forests, and is undergoing considerable modifications. In the School Circle no new plans were under preparation, but that for the Jaunsár chír forests was sanctioned during the year. There were deviations from the Deoban plan, due to short demand and to seed not being available for plantation work. The Tehri-Garhwál deodár forests yielded more trees than had been estimated, and consequently fellings were limited to a smaller area than had been laid down.

In the Central Circle there were considerable deviations from the work prescribed for 1889-90. Much had to be postponed owing to the press of other and more urgent work. The necessity of elasticity in these plans was insisted upon in last year's Review, and the experience gained during the past year shows how essential it is that the plans should be so framed that, while the scientific and systematic working of the forests is not deranged, modifications of the general scheme should be practicable according to the varying demands of an uncertain market, or the occasional pressure of more urgent work.

A statement is appended showing divisionally the forests which have been surveyed and for which permanent or temporary working plans exist or are in progress, and those which have not yet been taken in hand.

7. *Establishments.*—In the Central Circle the Range Officers are generally well reported on by their Divisional Officers, though in one instance a Forester had to be reduced and transferred. The Conservator remarks on the hopeless prospects of the Foresters, who, by long and approved service, have well earned promotion to the Ranger class, but

who are being passed over by the appointment of Rangers trained in the Forest School; but the Lieutenant-Governor understands that the number of ranges in this Circle has been considerably increased of late years, and that the Conservator is not precluded from filling part of the appointments by promotion from the lower grade. In the Oudh Circle the strength of the staff of Sub-Assistant Conservators was, after the close of the year, strengthened by the addition of two appointments in that class. During the year sanction was obtained to an increase in the subordinate establishment, costing Rs. 4,920; but the Conservator's anticipations, that even the revised establishment would prove too weak unless the superior staff were strengthened, were verified, and it had to be supplemented by the appointment of temporary Forest Guards. Two apprentices from the Forest School were provided with Rangerships.

In the establishment of the School Circle, two men hold the Ranger's certificate with honors, two have obtained the ordinary Ranger's certificate, and eight the Forester's certificate; there are in addition two men employed on special duty, holding the Forester's certificates. The subordinate staff in this Circle is generally well spoken of, and some are highly commended: though in the Jaunsár Division two Guards were convicted of taking bribes, and one was dismissed on a similar charge.

8. During the year many complaints have been received from Conservators of the increase of clerical work, in particular with reference to the audit of accounts and the increase in the statistical work demanded of them. This cannot help proving prejudicial to their outdoor work in the forests—the essential duty of the European officers of the Department.

9. *Breaches of Forest Law.*—The chief details are given in the table below:—

Prosecutions for breaches of Forest Law.

Circle.	Cases before the Courts.	Prosecutions.				*Cases compounded.*	
		Convictions.		*Acquittals.*		Number of persons	Amount received in compensation.
		Cases.	Persons.	Cases.	Persons.		
							Rs.
Central	32	22	31	5	18	805	2,181
Oudh	69	63	115	6	16	264	1,071
School	10	10	23	..	2	249	1,001
Total ..	111	95	169	11	36	1,318	4,253
Total for 1888-89 ..	182	118	270	18	73	1,823	4,636

The decrease both in the number of cases before the Courts and in the number of cases compounded, noticed in the last Review, has been more than maintained during the year under report. The

Oudh Circle alone maintains its large number of cases, the number last year being 71 and this year 69. In the Central Circle, where the number of persons involved in prosecutions decreased from 171 to 49, the most important case was the conviction of a Forest Guard for embezzlement in Kumaun: he was sentenced to one year's imprisonment. In the Oudh Circle by far the largest number of cases were reported from the Bahraich and Gonda Divisions, where illicit grazing and unauthorized fellings still continue; whereas the majority of the cases compounded (70 out of 84) were in the Gorakhpur Division, where, owing to the absence of any three-mile privileges, there are many petty offences. In the School Circle the prosecutions were mainly for misappropriation of forest produce, but there were also 15 cases of incendiarism against 12 of the previous year. The large and maintained decrease in the number of prosecutions is very satisfactory, as evidencing not only an improvement in the relations between Forest subordinates and their village neighbours, but also that the latter are now acquiescing in the restrictions imposed by the introduction of the Forest Act.

10. *Forest Fires.*—The following statement compares the fire conservancy operations of the year with those of 1889:—

Circle.		Area attempted to be protected.	Area actually protected.	Failures.	Percentage of failure.	Cost during the year.	Cost per acre.
		Acres.	Acres.	Acres.		Rs.	Pies.
Central	1888-89	422,881	420,284	2,597	0·61	18,819	8·54
	1889-90	512,175	480,757	31,418	6·13	18,797	7·04
Oudh	1888-89	487,919	437,213	50,706	10·39	11,525	4·49
	1889-90	495,341	466,513	28,828	5·82	13,082	5·38
School	1888-89	399,660	368,020	31,640	8·59	6,727	3·50
	1889-90	400,265	381,246	19,019	4·98	6,218	3·20
Total	1888-89	1,310,460	1,225,517	84,943	6·48	36,851	6·39
	1889-90	1,407,781	1,328,516	79,265	5·63	38,097	5·19

The figures are very satisfactory. The year was an unfavorable one: the dryness of the winter and the great heat in May rendered protection very difficult; but although the area that was attempted to be protected increased from 1,310,460 acres to 1,407,781 acres, the total area of the failures decreased. In the Central Circle only was there an increase in the area burnt over, but here also there was a larger area actually protected, additions amounting to 89,294 acres having been added during the year to the areas attempted to be protected. In this Circle only one fire extending over 663 acres is with confidence put down to incendiarism. In the Kumaun Division there were fires extending over 5,735 acres, of which 10 occurred when the fire-lines were cleared or the outer forest burnt,—evidence apparently of much carelessness in the burning of the forest lines. In the Lalitpur Division a fire burning over 6,827 acres spread from a zamíndári forest. The rules to be framed

under the recent amendments of the Forest Act, and which are now under the consideration of Government, should lessen this danger. In the Oudh Circle somewhat better results are shown than in the previous year. The cost per acre of protection from fire has increased by 0·89 pies, owing to extended fire conservancy operations and the additional precautions rendered necessary by the dryness of the season. The results however have justified the extra expenditure, the percentage of failures showing a considerable decrease. The cost per acre in Pilibhít was 11·94 pies, and was far too high; it is hoped that the Conservator will see his way to reducing the charges. Notwithstanding the dryness of the season, the results in the School Circle were very good. The percentage of total forest area under protection now amounts to 76·77 per cent. of the total area, and the cost of protection has decreased from 3·50 to 3·20 pies per acre: while the percentage of failures amounted to 4·98 only. It is satisfactory to note that there has been a decrease in incendiarism in Saháranpur, three fires over an area of 7,172 acres only being put down to this cause. In this Circle however a large area, 8,009 acres, was burnt, due to causes which might have been prevented, such as careless firing of forest lines or badly burnt outer lines; and the Lieutenant-Governor would be glad to know what has been done to those subordinates whose neglect of the duty specially assigned to them has led to such serious injury of the State forests.

11. *Grazing.*—The total receipts under this head amounted to Rs. 96,724 against Rs. 1,02,728 of the previous year. The decrease of Rs. 5,066 in the Central Circle is owing to the non-realization within the official year of all the grazing dues. In the Kumaun Division 58·24 per cent. of the total area is closed to grazing. The highest percentage is in the Ganges Division, where the area closed to grazing amounts to 90·85 per cent. of the total area. In the Gorakhpur Division of the Oudh Circle the number of cattle grazed has increased, and grazing is becoming scarce. New grazing rules for the Oudh forests were introduced on the 1st of October 1889. Generally speaking, they have worked well. In the School Circle there has only been a very slight increase in the area closed to grazing, certain areas having been closed in the Jaunsár Division to be worked as a coppice. The grazing receipts amounted to Rs. 27,782 against Rs. 28,664 of the previous year. The rules for the collection of grazing dues are working smoothly in the Saháranpur Division, and after much delay have been introduced into Dehra Dún.

12. *Natural Reproduction.*—The mild winter and the absence of frost were most favorable to natural reproduction. Sál seeded freely in all the Circles, but there was a marked absence of chír seed. Deodárs seeded only to a very small extent, and in the Jaunsár Division the blue pine, spruce and silver fir are said to have borne no seed. The effect of fire protection has again been very noticeable, and Mr. Bagshawe, who has returned to the School Circle after an absence of many years, sees a very marked improvement in the growth of the Jaunsár forests. In the submontane forests of the Central Circle

protection has resulted in such a perfect overhead cover, that until the forests are thinned further reproduction is impossible. Generally speaking, the reproduction was very good in fire and cattle protected areas, though in some divisions of the Oudh Circle the seed rotted owing to excessive rainfall. But in heavily grazed forests the young seedlings rapidly disappeared. The habit of firing the open forests to remove the old crop of grass, leaves the young growth little or no chance of existence.

13. The difficulty of successfully protecting chír forests, owing to the highly inflammable nature of the fallen fir leaves, has been engaging attention both in the Central and School Circles, and in both experiments are being carried on, in which the forests are periodically fired in the early part of the season when the fire can be kept under control. Little damage is done to anything but seedlings, and subsequent protection is rendered a comparatively easy matter.

14. *Artificial Reproduction.*—The expenditure on artificial reproduction during the past two years is compared in the margin. The Oudh Circle alone shows an increase. In the Central Circle there was a considerable decrease, and it is satisfactory to notice that the deficit in the accounts of previous years of the Chaubattia nursery has this year been converted into a surplus of Rs. 405. In this Circle operations were mainly confined to the hill forests, and in the School Circle the plantations in the Saháranpur and Dehra Dún Divisions have not shown satisfactory results: the expenditure on them has averaged Rs. 45 and Rs. 69 per acre, and the work will now be stopped. Even in the Jaunsár forests the results are not all that could have been desired, and the necessity of the plantations is said not to be proved, as natural reproduction, aided by careful protection, is largely in excess of the fellings, and it is not anticipated that the plantations will repay the money expended on them. In the Central Circle a large number of trees were planted out, but many of them died from drought owing to the failure of the winter rains. The bamboo plantations did well in Kheri, but failed in Gonda. With the exception of the plantation at Sakhwi, the Sissu plantations in the Oudh Circle did not thrive, owing to the plants having in some instances been swamped when young, and others having been attacked by insects. In last year's report it was said that the cultivation of vegetables in the Chakráta garden would be discontinued, and in view of the remarks in the Review of 1887-88 it is not understood why it has been resumed. The accounts again show a deficit of Rs. 353. The cultivation of vegetables is altogether outside the province of the Forest Department, and should be discontinued.

	1888-89.	1889-90.
	Rs.	Rs.
Central Circle	3,050	2,520
Oudh Circle	2,502	3,746
School Circle	1,735	1,692
Total ...	7,287	7,958

Climber cutting in the Central Circle extended over 18 square miles. The rate however was high, being Rs. 61 per square mile. This was owing to the size and great number of the climbers in the forests worked over in the Ganges Division, which had not been

interfered with since the introduction of fire conservancy. In the Oudh Circle more attention was devoted to the improvement thinnings, which have been found to greatly benefit the forests. Climber cutting and removal of inferior trees was carried on in the School Circle in accordance with the working plans, but in Jaunsár the work is said to have suffered from want of supervision due to press of other work.

From the Central Circle only is there any record of experiments carried on during the year. The measurements of the growth of sál trees shows that the annual increase in the girth of these trees in the thinned areas is about double that of the trees in unthinned areas. Experimental kaththa boiling proved that the trees selected by manufacturers yielded nearly 30 per cent. more extract than those rejected by them, and were also much richer in catechu.

15. *Communications and Buildings.*—The expenditure incurred on communications and buildings during the year is given in the statement below :—

Circle.	Roads and bridges.	Buildings.	Other works.	Total.	Percentage on gross expenditure of the year.
	Rs.	Rs.	Rs.	Rs.	
Central	34,624	17,204	597	52,425	20·4
Oudh	11,359	14,287	1,446	27,092	6·2
School	10,170	7,809	505	18,574	6·8
Total ...	56,153	39,390	2,548	98,091	10·2
Total, 1888-89 ...	58,151	42,695	1,740	1,02,586	12·2

In the Central Circle the expenditure remained very high : 137 miles of new roads were made at a cost of Rs. 10,245, of which Rs. 6,974 represents the cost of 30 miles of cart-road ; 1,650 miles of existing roads were repaired at a cost of Rs. 24,379 ; 27 new buildings were erected, and 92 existing buildings were improved and repaired ; the largest amount being expended in the Kumaun Division, for access to the new forests, the produce of which is being now brought on the market.

The expenditure in the Oudh Circle includes Rs. 3,687, the charges for the maintenance of the bridge-of-boats over the Sarda river, which is more than repaid by the tolls. Only 44⅓ miles of new roads were made during the year against 147⅓ miles in the previous year, and the expenditure on roads and bridges was reduced from Rs. 16,493 to Rs. 11,359. The expenditure on buildings, however, shows an increase of nearly Rs. 2,000. The new buildings include an office at Mahofe in the Pilibhít Division, a first class rest-house at Janakpur in the Gonda Division, and three second class rest-houses in the Kheri, Bahraich and

Gonda Divisions. In the School Circle the most important work of the year was the Thadiar sledge road, 1½ miles long, which was built at a cost of Rs. 4,813, to replace the sleeper slide which was destroyed by floods in August 1889. Head-quarter buildings for all ranges and most of the rest-houses required have now been completed, and the year's expenditure was mainly devoted to repairs and petty works.

16. *Yield and Working.*—The old Form No. 54 was revised by No. IX of the addenda and corrigenda to the Forest Code. The Conservators of the Central and Oudh Circles have submitted the return of yield of timber and fuel in the new form; and in the report of the Central Circle, the new terms to be used in describing fellings, prescribed by Circular No. 25F., dated 13th August 1889, have been adopted: but in the form submitted for the Oudh Circle no details of the fellings have been given. The Conservator of the School Circle has retained both the old form and the old terms: as there was no time to return the forms for correction, the old form and the old terms have been used for the purposes of this Review. The Conservators of the Oudh and School Circles will be directed to submit revised forms. The following abstract shows the timber, fuel and minor produce removed from the forests during the year, and the agency by which it was removed :—

Total outturn of the Forests.

	In cubic feet (000s omitted).							
	Class.				*By whom removed.*			
	Total outturn.	Selection fellings.	Clearances.	Thinnings.	Government agency.	Purchasers.	Free grantees.	Rightholders.
Central Circle.								
Timber ...	9,69,	5,39,	3,77,	53,	16,	7,82,	25,	1,46,
Firewood ...	17,19,	1,95,	15,03,	20,	1,74,	13,10,	54,	1,81,
Minor produce...	Rs. 1,74,046	...	...	...	Rs. 6,328	Rs. 1,67,028	Rs. 770	Rs. 820
Oudh Circle.								
Timber ...	24,73,	2,49,	19,83,	2,41,	5,28,	6,31,	11,67,	1,47,
Firewood ...	18,95,	...	11,08,	7,27,	10,53,	4,60,	3,21,	61,
Minor produce...	Rs. 1,42,709	...	...	...	Rs. 34,944	Rs. 93,539	Rs. 11,707	Rs. 2,609
School Circle.								
Timber ...	8,49,	6,02,	18,	2,29,	2,91,	4,45,	2,	1,11,
Firewood ...	27,97,	1,80,	22,54,	3,63,	5,61,	5,34,	7,	16,95,
Minor produce...	Rs. 69,226	...	...	...	Rs. 2,100	Rs. 58,628	Rs. 151	Rs. 8,347
Gross Total.								
Timber ...	42,91,	13,90,	23,78,	5,23,	8,35,	18,58,	11,94,	4,04,
Firewood ...	64,11,	3,76,	49,25,	11,10,	17,88,	23,04,	3,82,	19,37,
Minor produce...	Rs. 3,86,971	...	...	...	Rs. 43,372	Rs. 3,19,195	Rs. 12,628	Rs. 11,776

Timber to the amount of 4,291,000 cubic feet, fuel to the amount of 6,411,000 cubic feet, and minor produce to the value of Rs. 3,86,971 were removed from the forests during the year. The corresponding figures for the previous year were,—timber 4,246,000 cubic feet, fuel 5,939,000 cubic feet, and minor produce Rs. 3,36,482. The increase in output was thus mainly in fuel and minor produce.

17. The removals by purchasers and by Government agency respectively during each of the last two years are compared in the following table:—

		Government agency.			*Purchasers.*		
		Central Circle.	Oudh Circle.	School Circle.	Central Circle.	Oudh Circle.	School Circle.
		Cubic feet (000s omitted).					
Timber	1888-89	13,	3,57,	2,57,	6,72,	5,26,	4,27,
	1889-90	16,	5,28,	2,91,	7,82,	6,31,	4,45,
Firewood	1888-89	2,79,	2,76,	4,27,	9,39,	8,20,	4,62,
	1889-90	1,74,	10,53,	5,61,	13,10,	4,60,	5,34,

In paragraph 54 of the Central Circle report the Conservator comments on the decrease in the amount of timber removed by Government agency, but the figures of the statement above show that there was an increase of some 3,000 cubic feet of timber departmentally exported; it is assumed that the Conservator intended to note the decrease in the export of fuel and not timber. In the Central Circle the amount of timber removed by free grantees and right-holders decreased from 315,000 cubic feet to 171,000 cubic feet. This is said to be due to improved check on the indents submitted by villagers. There was a noticeable increase in the number of sál trees felled, but there was a large decrease in the number of oak and chír trees cut in the hills. In the Oudh Circle also there was a large decrease in the timber removed by privileged villagers, mainly in Kheri and Bahraich, and the figures and remarks of the two Conservators will be communicated to the Commissioners of Revenue in the districts concerned. It is most proper and necessary that waste should be avoided in the supply of the requirements of the people in the neighbourhood of the forests; but the reduction this year is so large, that there is some reason to apprehend that those requirements have not been sufficiently met. The Oudh Circle showed a large increase in the output of timber. This was mainly for railway sleepers, a business in which it has taken a very prominent and profitable part for the last six or eight years. In the School Circle there was an increase in the timber sold by Government agency, but the proceeds were lower owing to a fall in prices; it is, however, said that the cost of production has also been lessened, and it is noted that in Jaunsár under careful management departmental works pay better than direct sale to exporters. In the Central Circle there was an increase in the amount of fuel taken by grantees and right-holders, much having been used for burning lime during the year. The increase in the fuel removed by purchasers is put down to the favorable year. In Oudh the increase in the amount of fuel removed is due to the increase in the supply cut departmentally for the railways. In the School Circle comparison is difficult, owing to some doubt as to the correctness of last year's figures. In last year's report the amount of firewood removed in that year, 1888-89, by departmental and private agency was given as 427,000 cubic feet and 462,000 cubic feet respectively, but in the statement given on page 11 of this year's report the amount is shown as 344,000

cubic feet and 545,000 cubic feet. In the summary at the beginning of paragraph 32, the figures given however are 427,000 and 462,000, or the same as those given in last year's report. The Conservator will be asked to state which figures are correct. In each Circle there was an increase in the amount of minor produce removed. In the Oudh Circle the large quantities of baib grass were collected departmentally for the Lucknow Paper Mills, and there was an increased manufacture of catechu in the Kheri, Gonda, Bhera and Bahraich Divisions. In the School Circle there was a large increase in the sale of bamboos.

18. The following statement shows the number of trees felled in each Circle with their yield in timber, the fellings being classified as they come under selection fellings, thinnings or clearings for reasons given above :—

Statement of trees felled and their yield in timber.

Circle.		*Selection fellings.*		*Thinnings.*		*Clearances.*		*Total.*	
		Number of trees.	Cubic feet.	Number of trees.	Cubic feet.	Number of trees.	Cubic feet.	Number of trees.	Cubic feet.
Central...	1888-89 ...	74,814	959,000	...	...	14,545	95,000	89,359	1,054,000
	1889-90 ...	51,589	736,000	5,407	73,000	34,814	219,000	91,810	1,028,000
Oudh ...	1888-89 ...	3,317	260,000	286,329	71,000	916,375	2,060,000	1,206,021	2,390,000
	1889-90 ...	23,044	249,000	34,494	240,000	1,395,389	1,875,000	1,452,927	2,364,000
School ...	1888-89 ...	11,491	813,000	215,347	476,000	20,053	60,000	246,891	1,349,000
	1889-90 ...	10,990	955,000	273,547	535,000	9,971	51,000	294,508	1,541,000

Under the head of selection fellings there was in the Oudh Circle an increase from 3,317 to 23,044 in the number of trees felled, but the yield was less by 11,000 cubic feet, and the Conservator should have explained the reasons for the striking change in the size of the trees he has been felling. More detail will be expected in the next report regarding the forests to which the sleeper works have been moved, and the general condition of the woods which are now being thinned. These details are of course given in the working plans, and the Conservator will see in this remark the necessity for an early completion of these records. The average yield per tree in 1888-89 was 78 cubic feet, and in 1890 only 11 cubic feet. The yield in the School Circle was very high, averaging 87 cubic feet per tree.

19. The value of the timber and fuel in stock in the departmental depôts at the beginning and the end of the year is shown in the following table :—

Depôt stocks of timber and firewood.

Circle.		*At beginning.*		*At end.*	
		Quantity.	Value.	Quantity.	Value.
			Rs.		Rs.
Central	Timber ...	C. ft. 7,654	427	C. ft. 5,924	395
	Firewood ...	Mds. 1,766	1,762	Mds. 2,262	1,264
Oudh	Timber ..	C. ft. 1,300,495	4,75,461	C. ft. 850,032	4,55,581
	Firewood ...	Mds. 65,734	9,905	Mds. 143,095	27,966
School	Timber ...	C. ft. 147,255	1,00,863	C. ft. 150,704	1,00,279
	Firewood ...	Mds. 170,952	11,772	Mds. 187,038	16,438

The decrease in the stocks of the Central Circle is a consequence of the further contraction of departmental operations.

20. The produce of the forests and its estimated value are shown in the next statement :—

(000s omitted from cubic feet and rupees.)

		Central Circle.		Oudh Circle.		School Circle.	
		C. ft.	Rs.	C. ft.	Rs.	C. ft.	Rs.
Timber	1888-89 ...	10,02,	3,09,	24,62,	4,10,	7,83,	3,25,
	1889-90 ...	9,69,	3,77,	24,73,	4,12,	8,49,	3,46,
Firewood	1888-89 ...	17,06,	63,	16,67,	36,	25,58,	94,
	1889-90 ...	17,19,	55,	18,95,	68,	27,98,	1,08,
Grazing and minor produce.	1888-89 ...	...	1,61,	...	1,12,	...	68,
	1889-90 ...	...	1,75,	...	1,43,	...	69,

In the report for 1888-89 the produce of the year in firewood in the Central Circle was shown as amounting to 1,416,000 cubic feet, but in the report now received the figures for that year are given at 1,706,000.

21. *Financial Results.*—The financial results of the year's operations are shown in the appended tables :—

Receipts, Expenditure and Surplus.

Circles.	Receipts.					Expenditure.					Surplus.				
	1885-86.	1886-87.	1887-88	1888-89.	1889-90.	1885-86.	1886-87.	1887-88.	1888-89	1889-90	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs
Central ...	4,43,133	5,78,023	4,60,450	5,32,833	5,92,943	2,64,479	2,77,117	2,37,548	2,54,400	2,56,752	1,78,654	3,00,906	2,22,907	2,78,433	3,36,191
Oudh ...	6,81,712	6,68,674	4,29,870	5,39,654	6,88,550	5,03,197	3,75,130	3,14,439	3,10,879	4,32,127	1,78,515	2,93,554	1,15,431	2,23,775	2,56,429
School ...	3,36,640	3,36,859	3,57,004	3,90,315	4,32,660	2,06,842	2,67,343	2,77,593	2,67,670	2,71,104	1,29,807	69,516	79,472	1,22,645	1,61,556
Total ...	14,61,494	15,78,556	12,47,324	14,62,802	17,14,159	9,74,518	9,19,590	8,29,571	8,32,749	9,59,983	4,86,976	6,53,976	4,17,810	6,24,853	7,54,176

Receipts and Expenditure under the headings of Departmental Timber Operations, Other Revenue, and Formation, &c., of Forests.

Circles.		Departmental timber operations.			Other revenue.			Formation, protection, and improvements.	Net surplus.
		Receipts.	Charges.	Surplus.	Receipts.	Charges.	Surplus.		
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Central	1888-89 ...	50,668	31,489	19,179	4,82,165	1,09,687	3,72,478	1,13,224	2,78,433
	1889-90 ...	45,621	32,565	13,056	5,47,322	1,08,940	4,38,382	1,15,247	3,36,191
Oudh	1888-89 ...	3,25,267	1,49,040	1,76,227	2,14,387	78,346	1,36,041	89,493	2,22,775
	1889-90 ...	4,22,765	2,65,756	1,57,009	2,65,791	76,735	1,89,056	89,636	2,56,429
School	1888-89 ...	2,46,215	1,50,359	95,856	1,44,100	30,487	1,13,613	86,624	1,22,845
	1889-90 ...	2,52,330	1,48,327	1,04,003	1,80,330	33,968	1,46,362	88,809	1,61,556
Total	1888-89 ...	6,22,150	3,30,888	2,91,262	8,40,652	2,18,520	6,22,132	2,89,341	6,24,053
	1889-90 ...	7,20,716	4,46,648	2,71 068	9,93,443	2,19,643	7,73,800	2,03,692	7,54,176

Details of Receipts under the principal budget heads.

Circles.	Timber and other produce removed from the forests by Government agency.		Timber and other produce removed from the forests by consumers or purchasers.		Confiscated drift and waif wood.		Forests not managed by Government.		Miscellaneous.		Total in 1889-90.
	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Central ...	50,668	45,621	4,77,563	5,34,053	1,376	1,293	...	...	3,226	11,976	5,92,943
Oudh ...	3,21,283	4,16,903	1,97,409	2,40,851	10,588	20,193	...	...	10,374	10,609	6,88,556
School ...	2,38,790	2,44,676	1,28,110	1,56,089	7,425	7,654	13,795	18,747	2,195	5,494	4,32,660
Total ...	6,10,741	7,07,200	8,03,082	9,30,993	19,389	29,140	13,795	18,747	15,795	28,079	17,14,159

Expenditure on Conservancy and Works.

Circles.		Timber and other produce removed by Government agency.	Timber and other produce removed by consumers and purchasers.	Confiscated drift and waif wood.	Rent on leased forests.	Live-stock, stores, tools and plant.	Communications and buildings.	Demarcation, improvement, and extension of forests.	Miscellaneous.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Central ...	1888-89 ...	22,803	28,758	...	610	10,859	52,149	26,071	2,208	1,38,458
	1889-90 ...	23,312	25,121	...	503	9,582	52,425	30,599	1,497	1,43,039
Oudh ...	1888-89 ...	1,22,559	13,768	5,613	...	6,560	29,882	28,895	4,016	2,11,293
	1889-90 ...	2,41,249	12,040	7,096	...	5,479	27,093	30,465	2,042	3,25,464
School ...	1888-89 ...	1,23,152	2,653	2,692	11,150	4,018	20,555	17,055	* 6,947	1,88,222
	1889-90 ...	1,15,538	2,122	4,275	11,150	2,969	18,574	19,116	† 8,738	1,82,482
Total ...	1888-89 ...	2,68,514	40,179	8,305	11,760	21,437	1,02,586	72,021	13,171	5,37,973
	1889-90 ...	3,80,099	39,283	11,371	11,653	16,030	98,092	80,180	12,277	6,50,985

* Includes Rs. 3,417, being expenditure on forests not managed by Government.

† Includes Rs. 3,340, being expenditure on forests not managed by Government.

Expenditure on Establishments.

Circles.	Salaries.		Travelling allowance.		Contingencies.		Total.	
	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Central	97,885	95,175	12,767	13,189	5,290	5,349	1,15,942	1,13,713
Oudh	86,644	87,743	13,709	13,594	5,232	5,327	1,05,585	1,06,664
School	67,122	75,728	6,807	7,895	5,319	4,999	79,248	88,622
Total ...	2,51,651	2,58,646	33,283	34,678	15,841	15,675	3,00,775	3,08,999

22. From a financial point of view the year has been one of distinguished success: the surplus, Rs. 7,54,176, exceeds by over one lakh of

rupees that of 1886-87, which till now was the most profitable year the Department had known, and is nearly double the normal surplus of eight years ago. The receipts aggregated Rs. 17,14,159 against Rs. 14,62,802 of the previous year. The total expenditure has also risen, but in much smaller proportion, from Rs. 8,38,749 to Rs. 9,59,983. The increased receipts from the departmental timber operations are due to a renewed demand for sleepers and to the sale of old stock. The demand has been brisker in all Circles and in every direction. The increase in the expenditure from Rs. 5,37,973 to Rs. 6,50,985, under the head of Conservancy and Works, is not more than was to be expected from the increasing area of protected forests and the extension of operations.

23. In the Central Circle the receipts amounted to Rs. 5,92,943 against Rs. 5,06,869, the average of the previous six years, and was the highest on record. The expenditure was Rs. 2,56,752 against Rs. 2,54,400 of the previous year, and Rs. 2,60,224 the average of six years. There was a surplus in all the Divisions except Bánda, where there was a small deficit due to the purchase of additions to the Government forests. Of the gross receipts, departmental operations yielded Rs. 45,621 against Rs. 50,668 of the previous year, the charges under this head being Rs. 32,565 against Rs. 31,489. Departmental operations have been almost entirely stopped in the submontane divisions. The receipts from all other sources, which were largely from firewood and minor produce, were Rs. 5,47,322 against Rs. 4,82,165. There was a large increase in the timber removed by private agency, and the demand for standing timber is said to be quite equal to the supply. There were no marked variations in the different items of expenditure, the increase under the head, Formation, Improvement, Protection, being due to the purchase of land in Bánda. Last year a decrease was noticed under bamboos, due to the measures adopted to secure a rotation in the cutting. Beneficial results are already being experienced, and during the year the revenue was higher than in any of the seven previous years, except 1886-87, whilst the quantity of bamboos exported is smaller.

24. The receipts of the Oudh Circle were Rs. 6,88,556 against Rs. 5,39,654 in the year 1888-89, an increase contributed partly by a large sale of sleepers, partly by a reduction of stocks at the Bahramghát depôt, and partly by extensive thinnings of decayed trees in Bahraich. The expenditure amounted to Rs. 4,32,127, and shows a large increase over that of the previous year, which was Rs. 3,16,879; this was due to the sleeper operations taken in hand to supply the demand of the Bengal and North-Western and Lucknow-Pilibhít Railways, from which there has as yet been no return. The surplus therefore was only Rs. 2,56,429, which, though in excess of that of 1888-89, is less than that of 1886-87. The receipts from departmental operations were Rs. 4,22,765 against Rs. 3,25,267 of the previous year, the increase being mainly due to the sale of the old stock at Bahramghát. The railways also prefer buying firewood from the Forest Department direct, and large quantities of baib grass were collected and sold to the Lucknow Paper Mills. There was an increase of nearly Rs. 10,000 in the receipts from confis-

cated drift and waif wood, due to the better control over the salvage of drift timber in the Gorakhpur and Bahramghát Divisions. In addition to the receipts mentioned above, free produce to the extent of nearly one lakh was given away. In the statement in paragraph 60, showing the Circle expenditure "A" under different heads, the figures in column 3 for 1888-89 should be Rs. 5,613, and not Rs. 5,114. This will necessitate a reduction in the increase from Rs. 1,982 to Rs. 1,483. The totals for each year given in the same statement are also wrong: that for 1888-89 should be Rs. 2,11,293, not Rs. 2,11,295, and that for 1889-90 should be Rs. 3,25,464, not Rs. 3,25,463; and the total increase for the year should be Rs. 1,14,171, not Rs. 1,14,168.

25. In the School Circle the receipts amounted to Rs. 4,32,660 against Rs. 3,90,315 of the year 1888-89, and were higher than in any former year. The increase is said to be due to a brisker demand both in the general market and by Government Departments. The surplus amounted to Rs. 1,61,556, and was larger in every Division than in the previous year. The expenditure amounted to Rs. 2,71,104, and shows only a slight increase over that of the previous year, which was Rs. 2,67,470. The receipts from Departmental Works was Rs. 2,52,330 against Rs. 2,46,215, there being an increase of Rs. 10,441 in the Jaunsár Division chiefly on the sleeper operations. The charges under this head amounted to Rs. 1,48,327 against Rs. 1,50,359, giving a surplus of Rs. 1,04,003 against Rs. 95,856.

26. The officers of the Department are to be congratulated on a very successful year. The fire-protection was good, in spite of the exceptional risks of a very dry season,—one indication among others, it may be hoped, in the reports of those improved relations between the Foresters and the people, which Conservators must be most careful by every means in their power to cultivate. The demands of the timber-trade were brisk, and operations were active within the limits fixed in the working plans. The fuel-works were carefully superintended, the management generally was economical, and at the end of the year the surplus credited to Government was the largest which has ever been contributed by the forests of these Provinces. The Lieutenant-Governor has pleasure in acknowledging the services of all three Conservators and their Divisional Officers.

J. WOODBURN,

Chief Secy. to Govt., N.-W. P. and Oudh.

No. $\frac{764F.}{168A-10}$.

ORDER.—Ordered, that a copy of the above Resolution (with copy of the Report) be forwarded to the Conservators of Forests, Central, Oudh and School Circles, for information and guidance.

No. $\frac{765F.}{168A-11}$.

Ordered, also, that copy (with copy of Report) be forwarded to the Commissioners of the Meerut, Benares, Jhánsi, Rohilkhand, Allahabad, Kumaun, Sitapur and Fyzabad Divisions, for information.

No. $\frac{766F.}{168A-12}$.

Ordered, also, that copy (with copy of Report) be forwarded to the Comptroller-General, Forest Branch, Calcutta, for information.

No. $\frac{767F.}{168A-13}$.

Ordered, also, that copy (with copy of Report) be forwarded to the Inspector-General of Forests to the Government of India for information.

By order, &c.,

E. F. L. WINTER,

Under-Secy. to Govt., N.-W. P. and Oudh.

Statement showing Divisions for which Surveys and Permanent and Temporary Working Plans have been or are being made.

Circle.	Name of Division	Blocks surveyed			Working Plans.						Remarks.
					Permanent.			*Temporary.*			
		Completed.	In progress.	Not begun.	Completed and sanctioned.	In progress.	Not begun.	Completed and sanctioned.	In progress.	Not begun.	
Central.	1. *Naini Tal*—										
	I.—Naini Tal Subdivision.	The entire Division.	...	...	1. Naini Tal Working Circle.	...	...	...	...	...	The Lansdowne Reserved Forest in the Ganges Division remains to be surveyed.
	II.—Ranikhet Subdivision.				2. Ranikhet Working Circle.						
	2. *Kumaun* ...	Ditto ...	...	...	3. Nindhaur Working Circle.	...	...	...	...	...	
	3. *Garhwál* ...	Ditto ...	...	...	4. Rehar ...	...	...	1. Kosi ...	...	...	
								2. Patli Dún ...			
	4. *Ganges* ...	Ditto ...	...	...	5. Ganges Working Circle.	...	...	...	Kohtri ...	...	NOTE.—The Jhánsi, Lalitpur and Bánda Divisions are worked under *annual plans of operations*, *vide* section 62, Forest Department Code.
	5. *Jhánsi* ...	Ditto ...	...	...	...	...	...	...	...	...	
	6. *Lalitpur* ...	...	...	Not begun.	...	...	...	...	...	...	
	7. *Bánda (a)* ...	...	...	Not begun.	...	...	...	...	...	...	

(a) The Bánda forests, though not yet surveyed by the Forest Survey Branch, have all been surveyed by the Revenue Survey.

Statement showing Divisions for which Surveys and Permanent and Temporary Working Plans have been or are being made—(continued).

Circle.	Name of Division.	Blocks surveyed.			Working Plans.						Remarks.
					Permanent.			*Temporary.*			
		Completed.	In progress.	Not begun.	Completed and sanctioned.	In progress.	Not begun.	Completed, and sanctioned.	In progress.	Not begun.	
Oudh.	Kheri (trans-Sarda.)	I.—Kanjaria (compartments 1 to 14).	...	...	...	In progress (Kheri).	...	...		...	These three working circles are divided into 75 compartments.
		II.—Dudua (compartments 15 to 49).	...	...	...		...	...		...	Will be treated by number of trees.
		III.—Bhádi (compartments 50 to 75).	...	...	...		...	...		...	
	Gorakhpur ...	Ramgarh ...	1 ...	...	...		...	...	In progress (Gorakhpur).	...	Will be treated by area according to the demands of the market.
		Tilkonia ...	...	...	...		...	...		...	
		Bhilampur ...	2 ...	...	...		...	...		...	
		South Bánki ...	...	...	...		...	...		...	
		North Bánki ...	...	...	...		...	...		...	
		Bhári Baisi ...	3 ...	...	...		...	...		...	
		Chitáhi ...	...	...	...		...	...		...	
		West Lehra ...	...	...	...		...	...		...	
		Bhári Babban ...	4 ...	...	...		...	...		...	The brackets show the different proposed working circles:— 1. City Working Circle. 2. Local ditto. 3. Railway ditto. 4. Rohim ditto. 5. High forest dttto. 6. Domakhand.
		Dudhai ...	...	...	...		...	...		...	
		East Lehra ...	...	...	...		...	...		...	
		Sonári ...	5 ...	...	...		...	...		...	
		Nagwa ...	...	...	...		...	...		...	
		Domakhand ...	6 ..	...	...		...	...		...	

SOHOOL.	Pilibhít ...	Entire Division,	...	...	...		...	...		Not begun ...	All these forests have been surveyed, but the trees are not counted.
	Bhira* Subdivision.	Entire Subdivision.	...	...	...		...	...		Ditto.	
	Bahraich ...	Entire Division,	...	...	...		...	...		Ditto.	
	Gonda ...	Ditto ...	...	...	...		...	...		Ditto.	
	Dehra Dún ...	The whole ...	...	...	...	...	...	The whole ...	...	...	Sanctioned in G. O. No. $\frac{350F.}{652-11}$ dated 26th June 1888, for a period of 15 years.
	Saháranpur ...	The whole ...	...	...	...	...	...	...	...	The whole.	
		Kua ...	...	...	...	...	...	Kua ...	...	...	Included in the Deoban range working plan, sanctioned in G. O. No. $\frac{823F.}{869-6}$, dated 24th December 1888 for a period of 10 years.
		Singori ...	...	...	...	...	...	Singori ...	...	...	
		Raura ...	...	...	...	...	...	Raura ...	...	...	
		Kota ...	...	...	...	...	...	Kota ...	...	...	
		Bandla ...	...	...	...	...	...	Bandla ...	...	...	
		Raura ...	...	...	...	...	...	Raura ...	...	...	
	Jaunsár ...	...	Korwa ...	...	...	...	...	Korwa ...	...	...	
		Inari ...	...	...	...	...	...	Inari ...	...	...	
		Bodiar ...	...	...	...	...	...	Bodiar ...	...	...	
		Moila ...	...	...	...	...	...	Moila ...	...	...	
		Missan ...	...	...	...	...	...	Missan ...	...	...	
		Chattri ...	...	...	...	...	...	Chattri ...	...	...	
		Kanasar ...	...	...	...	...	...	Kanasar ...	...	...	
		Kopti ...	...	...	...	...	...	Kopti ...	...	...	

The difference between the Kheri forests and the Gorakhpur forests is this: Kheri is one large mass of forests, and the formation of the compartments has been arbitrary: the boundaries of the compartments are for the most part cut lines. In Gorakhpur the forests are almost all isolated or separated by small rivers. In Gorakhpur the forests or blocks are in most cases divided into compartments by cut lines or well marked stream beds.

The Kheri working plan has been sent to the Press.

The Gorakhpur working plan will soon be despatched to the Press.

* Bhira, though a separate charge at present, is a part of the Kheri Division.

Statement showing Divisions for which Surveys and Permanent and Temporary Working Plans have been or are being made—(continued).

Circle.	Name of Division.	Blocks surveyed.			Working Plans.						Remarks.
					Permanent.			*Temporary.*			
		Completed.	In progress.	Not begun.	Completed and sanctioned.	In progress.	Not begun.	Completed and sanctioned.	In progress.	Not begun.	
Sonoor.	Jaunsár	Asmari ...	...	...	...	...	...	Asmari ...	...	...	
		Marauwa ...	...	...	...	...	...	Marauwa ...	...	...	
		Thona ...	...	...	...	...	...	Thona ...	...	...	
		Kutniar ...	...	...	...	...	...	Kutniar ...	...	...	
		Kanjatra ...	...	...	...	...	...	Kanjatra ...	...	...	
		Jadi ...	...	...	...	...	...	Jadi ...	...	...	
		Darna ...	...	...	...	...	...	Darna ...	...	...	
		Matkangra ...	...	...	...	...	...	Matkangra ...	...	...	
		Mohna ...	...	...	...	...	...	Mohna ...	...	...	
		Durani ...	...	...	...	...	...	Durani ...	...	...	
		Ekra ...	...	...	...	...	...	Ekra ...	...	...	
		Kulared ...	...	...	...	...	...	Kulared ...	...	...	
		Amlokri ...	...	...	...	...	...	Amlokri ...	...	...	
		Danda ...	...	...	...	...	...	Danda ...	...	...	Included in the Deoban Range Working Plan, sanctioned in G. O. No. 822F./868-6, dated 24th December 1888, for a period of 10 years.
		Hajawa ...	...	...	...	...	...	Hajawa ...	...	...	
		Duliana ...	...	...	...	...	...	Duliana ...	...	...	
		Pandawa ...	...	...	...	...	...	Pandawa ...	...	...	

	Bikta ...	...	...	...	...	...	Bikta ...	...	...				
	Bajamara ...	...	...	...	...	...	Bajamara ...	...	...				
	Leguna ...	...	...	...	...	...	Leguna ...	...	...				
	Konain ...	...	...	...	...	...	Konain ...	...	...				
	Maral ...	...	...	...	...	...	Maral ...	...	...				
	Siari ...	...	...	...	...	...	Siari ...	...	...				
	Gutugad ...	...	...	...	...	...	Gutugad ...	...	...				
	Bhujkoti ...	...	...	...	...	...	Bhujkoti ...	...	...				
	...	Karamba ...	...	...	...	...	Karamba (part of).	...	...				
	Panikinal ...	...	...	...	...	...	Panikinal ...	...	...				
	Panjgaon ...	...	...	...	...	...	Panjgaon (part of).	...	...				
	Barabagh ...	...	...	...	...	...	Barabagh ...	...	...				
	Haripur ...	...	...	...	...	...	Haripur (including Khadar).	...	...				
	Lurli ...	...	...	...	...	...	Lurli ...	...	...				
	Soitoli ...	...	...	...	...	...	Soitoli ...	...	...				
	Forest garden ...	...	...	...	...	...	Forest garden ...	...	...				
	Kalaura ...	...	...	...	...	...	Kalaura ...	...	...				
	Chilar ...	...	...	...	...	...	Chilar (part of),	...	...				
	Banadhar ...	...	...	...	...	...	Banadhar (part of).	...	...				
	Bagur ...	...	...	...	...	...	Bagur (part of),	...	...				
	Ubra ...	...	...	...	...	...	Ubra (part of) ...	...	...				
	Ninus ...	...	...	...	...	...	Ninus ...	...	...				
	Bastar ...	...	...	...	...	...	Bastar (part of),	...	...				
	Tiuni ...	...	...	...	...	...	Tiuni ...	...	...				

Included in the Working Plan of the Chir Forest Circle, sanctioned in G. O. No. $\frac{3F.}{963-8}$ dated 4th January 1890, for a period of 10 years.

Statement showing Divisions for which Surveys and Permanent and Temporary Working Plans have been or are being made—(continued).

Circle.	Name of Division.	Blocks surveyed.			Working Plans.						Remarks.
					Permanent.			*Temporary.*			
		Completed.	In progress.	Not begun.	Completed and sanctioned.	In progress	Not begun.	Completed and sanctioned.	In progress.	Not begun.	
SCHOOL.	Jaunsár	Rangwar ...	..	...	...	...	...	Rangwar ...	...	...	Included in the Working Plan of the Chír Forest Circle, sanctioned in G. O. No. $\frac{2F}{903\text{-}6}$, dated 4th January 1890, for a period of 10 years.
		Panchkoti ...	...	...	...	...	...	Panchkoti (part of).	...	...	
		Sangared ...	...	...	...	...	...	Sangared ...	...	...	
		Hanol ...	...	...	...	...	...	Hanol ...	...	...	
		Chatra ...	...	...	...	...	...	Chatra (part of),	...	...	
		Molta ...	...	...	...	...	...	Molta ...	...	...	
		Kunigad ...	...	...	...	...	...	Kunigad (part of).	...	...	
		Dhudu ...	...	...	...	...	...	Dhudu ...	...	...	
		Sitki ...	...	...	...	...	...	Sitki ...	...	...	
		Chandnigad ...	...	...	...	...	...	Chandnigad (part of).	...	...	
		Ragi ...	...	...	...	...	...	Ragi ...	...	...	
		Majog ...	...	...	...	...	...	Majog ...	...	...	
		Kathanj ...	...	...	...	...	...	Kathanj ...	...	...	
		Banpur ...	...	...	...	...	...	Banpur ...	...	...	
		Bhatar ...	...	...	...	...	...	Bhatar ...	...	...	

Kerngad ...	...	...	...	...	...	Kerngad (part of),	...	...	Included in the Tehri-Garhwál Working Plan, sanctioned in G. O. No. 735F./832-4, dated 16th November 1888, for a period of 20 years.		
Utasna ...	...	...	...	...	...	Utasna (part of),	...	...			
Inari ...	...	...	...	...	...	Inari ...	...	...			
Lohasu ...	...	...	...	...	...	Lohasu ...	...	...			
Chakora ...	...	...	...	...	...	Chakora ...	...	...			
Garasna ...	...	...	...	...	...	Garasna ...	...	...			
Banarpani ...	...	...	...	...	...	Bansrpani ...	...	...			
Naini Thach ...	...	...	...	...	...	Naini Thach ...	...	...			
Ghoria ...	...	...	...	...	...	Ghoria ...	...	...			
Dhamti ...	...	...	...	...	...	Dhamti ...	...	...			
Thunwara ...	...	...	...	...	...	Thunwara ...	...	...			
Kondar ...	...	...	...	...	...	Kondar ...	...	...			
Thadiar ...	...	...	...	...	...	Thadiar ...	...	...			
Partil ...	...	...	...	...	...	Partil ...	...	...			
Temple ...	...	...	...	...	...	Temple ...	...	...			
Dopta ...	...	...	...	...	...	Dopta ...	...	...			
Katatach ...	...	...	...	...	...	Katatach ...	...	...			
Jaurasi ...	...	...	...	...	...	Jaurasi ...	...	...			
Kanga ...	...	...	...	...	...	Kanga ...	...	...			
Patangni ...	...	...	...	...	...	Patangni ...	...	...			
Kimari ...	...	...	...	...	...	Kimari ...	...	...			
Bhagiar ...	...	...	...	...	...	Bhagiar ...	...	...			
Pipal ...	...	...	...	...	...	Pipal ...	...	...			
Dhikuri ...	...	...	...	...	...	Dhikuri ...	...	...			

Statement showing Divisions for which Surveys and Permanent and Temporary Working Plans have been or are being made—(continued).

Circle.	Name of Division.	Blocks surveyed.			Working Plans.						Remarks.
					Permanent.			*Temporary.*			
		Completed.	In progress.	Not begun.	Completed and sanctioned.	In progress.	Not begun.	Completed and sanctioned.	In progress.	Not begun.	
School.	Jaunsár ...	Bamsu ...	...	...	...	...	...	Bamsu ...	...	...	Included in the Tehri-Garhwál Working Plan, sanctioned in G. O. No. $\frac{736F}{632-4}$, dated 16th November 1888, for a period of 20 years.
		Dumrali ...	...	...	...	...	...	Dumrali ...	...	...	
		Kanda ...	...	...	...	...	...	Kanda ...	...	...	
		Balcha ...	..	...	...	...	...	Balcha ...	...	...	
		Murali ...	...	...	...	...	...	Murali ...	...	...	
		Ola ...	...	...	...	...	...	Ola ...	...	...	
		...	Gokal ..	...	...	...	...	Gokal ...	...	...	
		...	Duchanu ...	...	...	...	...	Duchanu ...	...	...	
		...	Jagta ...	...	...	...	...	Jagta ...	...	...	
		...	Dedragad ...	...	...	...	...	Dedragad ...	...	...	
		...	Andrigad ...	...	...	...	...	Andrigad ...	...	...	
		...	Boktargad ...	...	...	...	...	Boktargad ...	...	...	
		..	Tara Mandal ...	...	...	...	...	Tara Mandal ...	...	...	
		...	Maunda ...	...	...	...	...	Maunda ...	...	...	
		...	Morim ...	...	...	...	...	Morim ...	...	...	
		...	Kangagad ...	...	...	...	...	Kangagad ...	...	...	
		...	Deotalgad ...	...	...	...	...	Deotalgad ...	...	...	

	...	Kunigad ...	...	...	...	...	Kunigad ...	...	...	
	...	Dwantigad ...	...	...	...	...	Dwantigad ...	...	...	
	...	Saligad ...	...	...	...	...	Saligad ...	...	...	
	...	Jodargad ...	...	...	...	...	Jodargad ...	...	...	
	...	Noranu ...	...	...	...	...	Noranu ...	...	...	
	...	Naintwar ...	...	...	...	...	Naintwar ...	...	...	
	...	Datmir ...	...	...	...	...	Datmir ...	...	...	
	Dharagad ...	...	...	...	...	...	Mundali sub-block of Dharagad block.	...	...	Working plan partly sanctioned in G. O. No. 812F./461—31, dated 21st December 1888.
	Raiengarh ...	...	...	...	...	...	...	...	Raiengarh (closed forests).	
	Dadi ...	...	...	...	...	...	...	...	Dadi (closed forests).	
	...	...	...	...	...	...	...	...	Panjgaon (remainder of).	
	Thinna ...	...	...	...	...	...	...	...	Thinna ...	
	Amlawa ...	...	...	...	...	...	...	...	Amlawa ...	
	Daira ...	...	...	...	...	...	...	...	Daira ...	
	Moila ...	...	...	...	...	...	...	...	Moila ...	
	...	Karamba ...	...	...	...	...	...	...	Karamba (remainder of).	
	Bagora ...	...	...	...	...	...	...	...	Bagora ...	
	Utasna ...	...	...	...	...	...	...	...	Utasna (remainder of).	
	Punaha ...	...	...	...	...	...	...	...	Punaha ...	
	Kharsi ...	...	...	...	...	...	...	...	Kharsi ...	
	Barasti ...	...	...	...	...	...	...	...	Barasti ...	
	Karali ...	...	...	...	...	...	...	...	Karali ...	
	Nadu ...	...	...	...	...	...	...	...	Nadu ...	
	Majbira ...	...	...	...	...	...	...	...	Majbira ...	

Statement showing Divisions for which Surveys and Permanent and Temporary Working Plans have been or are being made—(concluded).

Circle.	Name of Division.	Blocks surveyed.			Working Plans.						Remarks.
					Permanent.			*Temporary.*			
		Completed.	In progress.	Not begun.	Completed and sanctioned.	In progress.	Not begun.	Completed and sanctioned.	In progress.	Not begun.	
Sehoor.	Jaunsár ...	Bomnai ...	...	...	...	...	...	...	...	Bomnai ...	
		Riknar ...	...	...	...	...	...	...	...	Riknar ...	
		Chilar ...	...	...	...	...	...	...	...	Chilar (remainder of).	
		Banadhar ...	...	...	...	...	...	...	...	Banadhar (remainder of).	
		Lakhau ...	...	...	...	...	...	...	...	Lakhau ...	
		Tutwa ...	...	...	...	...	...	...	...	Tutwa ...	
		Harianta ...	...	...	...	...	...	...	...	Harianta ...	
		Jako ...	...	...	...	...	...	...	...	Jako ...	
		Sangrani ...	...	...	...	...	...	...	...	Sangrani ...	
		Maura ...	...	...	...	...	...	...	...	Maura ...	
		Lakua ...	...	...	...	...	...	...	...	Lakua ...	
		Dabar ...	...	...	...	...	...	...	...	Dabar ...	
		Chauriaban ...	...	...	...	...	...	...	...	Chauriaban ...	
		Kathian ...	...	...	...	...	...	...	...	Kathian ...	
		Kanun ...	...	...	...	...	...	...	...	Kanun ...	

	Jakni Lani ...	...	...	...	...	...	...	...	...	Jakni Lani ...	
	Malon ...	...	...	...	...	...	...	...	...	Malon ...	
	Bagur ...	...	...	...	...	...	...	...	...	Bagur (remainder of).	
	Ubra ...	...	...	...	...	...	...	...	...	Ubra (remainder of).	
	Dhanras ...	...	...	...	...	...	...	...	...	Dhanras ...	
	Koti ...	...	...	...	...	...	...	...	...	Koti ...	
	Panchkoti ...	...	...	...	...	...	...	...	...	Panchkoti (remainder of).	
	Bastar ...	...	...	...	...	...	...	...	...	Bastar (remainder of).	
	Pushrar ...	...	...	...	...	...	...	...	...	Pushrar ...	
	Lambidhar ...	...	...	...	...	...	...	...	...	Lambidhar ...	
	Chamba ...	...	...	...	...	...	...	...	...	Chamba ...	
	Morutach ...	...	...	...	...	...	...	...	...	Morutach ...	
	Burach ...	...	...	...	...	...	...	...	...	Burach ...	
	Chandnigad ...	...	...	...	...	...	...	...	...	Chandnigad (remainder of).	
	Mandhol ...	...	...	...	...	...	...	...	...	Mandhol ...	
	Gulan ...	...	...	...	...	...	...	...	...	Gulan ...	
	Chachpur ...	...	...	...	...	...	...	...	...	Chachpur ...	
	Tons and Sharun.	...	...	...	...	...	...	...	...	Tons and Sharun.	
	Chatri ...	...	...	...	...	...	...	...	...	Chatri (remainder of).	
	Khunigad ...	...	...	...	...	...	...	...	...	Khunigad (remainder of).	
	Ringali ...	...	...	...	...	...	...	...	...	Ringali ...	

J. WOODBURN,

Chief Secy. to Govt., N.-W. P. and Oudh.

No. 966-F., dated Calcutta, the 24th November 1890.

From—SIR E. C. BUCK, Secretary to the Government of India, Revenue and Agricultural Department,

To—The Secretary to the Government of the N. W. Provinces and Oudh, Revenue (Forests) Department.

I AM directed to acknowledge the receipt of the Annual Progress Report of Forest Administration in the North-Western Provinces and Oudh for 1889-90, together with the Resolution* of His Honour the Lieutenant-Governor thereon.

* No. $\frac{761 F.}{168 A.-P}$, dated 23rd October 1890.

2. The volume containing the Reports of the three Circles reached the Government of India on the 27th October, instead of on the 1st September, the date prescribed. As stated in the orders reviewing the Reports for 1888-89, special importance is attached to the punctual submission of the Forest Reports in view of the necessity of their being dealt with before the Inspector General of Forests goes on tour. His Excellency in Council trusts that the notice taken by His Honour the Lieutenant-Governor of the delay which has again occurred will secure the punctual submission of the Reports in future.

3. The alterations made during the year in the areas under forest management were not important. In all, 83 square miles were gazetted as Reserves under the Forest Act, but this was more than balanced, at least on paper, by the reduction, on recomputation of areas by the Forest Survey Branch, of 88 square miles in the Reserved tracts. An area of 1 square mile was added to the Protected Forests and 3 square miles were excluded. The area of the Unclassed State Forests remained unaltered during the year.

4. Notifications were issued proposing the reservation in the Central Circle of 141 square miles in the aggregate, and the Forest Settlement of these areas is, it is stated, in progress. Certain questions affecting the legal position of the Airideo Forest, which it is proposed to replace under the management of the Forest Department, were also enquired into and settled, and proposals for improving the boundaries of certain forests in the Oudh Circle, by means of exchanges with private owners, were under consideration.

5. The attention paid to the maintenance of the forest boundaries, on which a sum of Rs. 6,106 was expended during the year, appears to have been sufficient in all Circles; but, as heretofore, the information on the subject is given in a different form by each Conservator and is consequently difficult to summarize. This defect will, however, it is hoped, shortly be corrected by the prescription of a uniform plan of reporting on the subject. The repeated failure of the Nepal authorities to clear the neutral strip on their side of the boundary of the Government forests is to be regretted, but this matter is being separately considered by the Government of India.

6. Surveys were in progress during the year in all three Circles and considerable progress was made. In the Central Circle, in addition to Departmental surveys by local officers, a Survey of India party was employed during the year. In the Oudh Circle, some small Departmental surveys were made in connection with the proposed exchanges of land for the purpose of consolidating the forest boundaries. In the School Circle, the survey of the Tehri-Garhwal Leased Forests by the Forest Survey Branch was continued in addition to some Departmental surveys. The total expenditure under this head amounted during the year to Rs. 5,679.

7. Although considerable progress has been made in the preparation of Working-Plans for the forests of the North-Western Provinces and Oudh, much, as was noted in the orders passed on the Report for the preceding year, yet remains to be done in this direction, and His Excellency in Council is, therefore,

pleased to learn that this work will be pushed forward, and that His Honour the Lieutenant-Governor is of opinion that the results of past operations tend to show that a more systematic working of the forests, in accordance with the provisions of such Plans, would have the effect of improving both the forests and the revenue. These views are entirely in accord with those of the Government of India, who are not prepared to accept the criticisms on Working-Plans recorded by the Conservator of the Oudh Circle in paragraph 12 of his Report. Forest operations cannot be conducted with a settled purpose, or with order and method, without Working-Plans, and exceedingly useful Plans can be framed without very exact data, which can only be gradually collected. Precise methods of forest treatment can be applied even where the demand for the produce is less than the supply, as well as without an accurate knowledge of the rates of growth of the trees which, even in the case of the most elaborate and perfect Plans, can only be approximately estimated.

In this connection, I am to add that the classification of Working-Plans into "permanent" and "temporary," adopted by the Conservator of the Central Circle, is not admissible. All Working-Plans are necessarily provisional, in so far that they only prescribe in detail the operations to be carried out during a limited number of years, and are subject to periodic revision. But the Government of India recognize only one class of such Plans, namely, those which have been sanctioned by a Local Government in the manner prescribed by the Forest Code.

8. Although the sum expended was somewhat less than that during the previous year, satisfactory progress was made in developing the forest resources of the Province by the construction of forest export-roads and buildings. The expenditure amounted to Rs. 98,091, as compared with Rs. 1,02,586 expended during the preceding year. Of this sum, Rs. 56,153 was for the construction of roads and bridges, and, in addition to maintaining existing roads and bridges, covered the cost of constructing 183 miles of new roads, including 30 miles of cart road in the Central Circle, at a cost of Rs. 6,974, and the Thadiar sledge-road, 1½ miles long, in the School Circle, built at a cost of Rs. 4,843 to replace the sleeper slide destroyed by floods in the previous year. Rs. 39,390 were expended on buildings, of which 33 were new and included an office, a first-class rest-house, and three second-class rest-houses.

9. There has now, for some years past, been an annually recurring decrease both in the number of prosecutions in Court for breaches of the Forest Rules and in the number of cases compounded, and this has continued in the year under review, during which only 110 cases, as compared with 129 in the previous year, were prosecuted and 696 cases, or 48 less than in the preceding year, were compounded. Considering the large forest area (nearly 4,000 square miles) to which these cases relate and the number of people who have recourse to the forests, this is a small number of offences, and the Government of India concur in the satisfaction expressed by His Honour the Lieutenant-Governor at this proof of an improvement in the relations between the Forest Subordinates and their village neighbours and of acquiescence by the latter in the restrictions imposed by the Forest Act.

10. The results of the fire-protective measures undertaken during the year were on the whole satisfactory, although the year, owing to its dryness, was unfavourable for fire-protection. Notwithstanding that the area it was attempted to protect was somewhat greater than that in the year before, the area burnt was less and only amounted to 5 per cent. of the total area under special fire-protection: the cost of protection was also somewhat lower per square mile than in the preceding year. The Government of India are glad to observe that the Lieutenant-Governor has noticed the large number of destructive fires which originated while burning the fire-lines or were due to these lines being insufficient to prevent fires from crossing them. In the School Circle, 8,009 acres were burnt by fires due to one or other of the above preventible causes; while in the Kumaun Division of the Central Circle, carelessness in the burning of the fire-lines is accountable for ten fires which spread over an aggregate area of 4,164 acres. Such accidents indicate that the subordinate forest officials are either

insufficiently instructed in the art of burning fire-lines or are inadequately supervised, and the Government of India observe with satisfaction that the subject is receiving His Honour the Lieutenant-Governor's attention.

The account recorded in appendix I to the Report of the School Circle of the experiments in connection with a new system of protecting chír forests, by periodical firings during the winter, has been read with interest. It is noticed that the fires are said to have destroyed a large proportion of the seedlings under the age of 4 years, and if, as suggested, the firings were to be triennial, it may be feared that very few saplings would persist. But the Government of India desire that, before any decision is come to with regard to the general introduction of the system, the results of these experiments may be carefully watched and further reported on, as the observations hitherto recorded with regard to the bad effects on forest vegetation of even slight fires do not tend to support the innovation.

11. The areas closed to grazing in each Circle during the whole or part of the year were as follows :—

Circle.	Total area under forest management. Square miles.	Area closed to grazing. Square miles.	Percentage of whole area closed.
Central	1,771	1,031	58
Oudh	1,203	543	45
School	816	237	29
Total ...	3,790	1,811	48

The fees received for grazing amounted to Rs. 96,724, as compared with Rs. 1,02 728 in the previous year ; but the decrease is apparent only, as it is due to the non-realization within the official year of all the grazing dues. The delay in introducing the new grazing rules into the Dehra Dun Division of the School Circle and the relatively small area closed to grazing in that Circle are noticeable.

12. The remarks concerning natural reproduction in the forests are satisfactory, in view of the proof they afford of the utility of protecting forests from fire and grazing.

13. There is little to record with regard to the Cultural Operations carried out. No additions were made to the area under Regular Plantations in any of the Circles, and the areas subjected to improvement sowings or plantings were slight.

"*Improvement fellings*" and the cutting of climbers were carried out over areas of 18 square miles in the Central and of 31⅛ square miles in the School Circle ; but the area so treated in the Oudh Forests cannot be ascertained from the Report of that Circle. Next to protecting forests from injury from fire or other sources, the removal of inferior growths is at once the most practical and economical method of improving the composition of the growing stock in the forests, and the Government of India desire that it should receive greater attention and be carried out on a larger scale than has hitherto generally been the custom.

14. There was a slight increase, as compared with the preceding year, in the outturn of material from the forests, as will be seen from the following statement :—

Agency by which removed.	Material removed.				Average outturn per square mile.		
	Timber.	Fuel.	Bamboos	Minor produce.	Timber and fuel.	Bamboos.	Minor produce.
	c. ft.	c. ft.	No.	Rs.	c. ft.	No.	Rs.
Reserved.							
Government ...	827,108	1,694,680	807,980	37,422	...	...	...
Purchasers ...	1,771,346	2,030,462	15,546,653	2,05,510	...	...	...
Free-grants ...	1,193,140	382,828	93,800	12,520	...	...	...
Right-holders ...	318,844	1,937,356	89,100	11,358	...	..	...
TOTAL ...	4,110,438	6,045,326	16,537,533	2,66,810	2,828	4,605	74
Protected.							
Government ...	830	92,728	48,640	...	...	...	...
Purchasers ...	33,746	196,134	30,040	4,120	...	...	...
Free-grants ...	1,600	...	...	...	...	...	...
Right-holders ...	85,550	...	...	...	...	...	...
TOTAL ...	121,726	288,862	78,680	4,120	6,128	1,174	62
Unclassed.							
Government ...	6,591	...	68,480	3	...	...	...
Purchasers ...	53,093	77,840	1,109,400	5,037	...	...	...
Free-grants ...	...	...	...	...	...	...	...
Right-holders ...	...	...	...	...	...	...	...
TOTAL ...	59,684	77,840	1,177,880	5,040	1,042	8,923	38
Grand Total in 1889-90.	4,291,848	6,412,028	17,794,093	2,75,970	2,824	4,698	73
Grant Total in 1888-89	4,247,424	5,641,242	17,844,880	2,36,267	2,604	4,700	62
Increase or decrease in 1889-90.	+44,424	+770,786	—50,787	+39,703	+220	—2	+11

NOTE.—In the Central Circle Form No. 55, bamboos are shown by scores instead of in numbers, as in the Forms submitted by the other Circles. They have, however, been reduced to numbers in above statement.

The increase was due to larger removals of produce both by Government agency and by purchasers. The quantity of produce recorded as removed by free-grantees and right-holders was less than in the previous year, except in the case of fuel, of which a slightly larger quantity was removed. The decrease occurred chiefly in the Central Circle, where the quantity of timber removed decreased from 316,223 cubic feet to 170,905 cubic feet. This is said to be due to the introduction of an improved check on the indents submitted by the villagers, and I am desired to suggest that it might be practicable to extend this improvement to other Circles and Divisions.

15. The result, from a financial point of view, of the year's working has been, as remarked by His Honour the Lieutenant-Governor, one of distinguished success. Both the gross receipts and the net surplus of all three Circles were higher than have ever been known before, and the latter, as will be seen from the following statement, exceeded by one lakh and thirty thousand rupees the surplus of the preceding year :—

Circle.	Receipts.	Charges.	Surplus.	Proportion of Surplus to Gross Receipts.
	Rs.	Rs.	Rs.	Per cent.
Central	5,92,943	2,56,752	3,36,191	57
Oudh	6,88,556	4,32,127	2,56,429	37
School	4,32,660	2,71,104	1,61,556	37
Total in 1889-90 ...	17,14,159	9,59,983	7,54,176	44
Total in 1888-89 ...	14,62,802	8,38,749	6,24,053	43
Increase in 1889-90 ...	2,51,357	1,21,234	1,30,123	1

Although the expenditure has necessarily risen slightly from year to year with the increasing receipts, the latter have, as stated in the Lieutenant-Governor's Resolution, increased at a much faster rate, with the result that there has been a steady rise in the net surplus. This of itself is a satisfactory feature in the Forest Administration of the Province and indicates careful and economical management. I am, however, to draw your attention to the fact, which will be seen from the following statement compiled from those in Form No. 62 submitted with the Annual Forest Reports for the past ten years, that the sum devoted each year to the organization and improvement of the forests, apart from that spent on timber works and operations connected with the realization of the material, has not kept pace with the improved revenue :—

Year	Total Gross Receipts.	Expenditure.			Percentage of Gross Receipts spent on the improvement of the Forests.
		On timber works and the exploitation of the produce of the Forests.	On the organization and improvement of the Forests.	Total Gross Expenditure.	
	Rs.	Rs.	Rs.	Rs.	
1880-81 ...	9,42,229	4,54,437	2,25,137	6,79,574	24
1881-82 ...	10,66,093	6,77,253	2,38,959	9,16,212	22
1882-83 ...	10,13,403	5,92,739	2,46,285	8,39,024	24
1883-84 ...	16,11,383	7,79,208	2,62,676	10,41,884	16
1884-85 ...	15,72,319	7,43,947	2,76,155	10,20,102	18
1885-86 ...	14,61,495	7,01,505	2,73,014	9,74,519	19
1886-87 ...	15,71,525	6,41,624	2,77,956	9,19,580	18
1887-88 .	12,47,384	5,44,896	2,84,678	8,29,574	23
1888-89 ...	14,62,802	5,49,408	2,89 341	8,38,749	20
1889-90 ...	17,14,159	6,66,291	2,93,692	9,59,983	17
Average ...	13,66,279	6,35,131	2,66,789	9,01,920	20

The Government of India, I am directed to say, desire that the importance of improving the condition of the forests should not be lost sight of in the efforts which are wisely being made to increase, by sound administration and economical control, the profits arising from their management.

16. The reorganization of the Superior Staff of the Forest Department, to which reference is made in paragraph 7 of His Honour's Resolution, is now

under consideration, together with the question of strengthening the Executive Staff and improving the prospects of its members, with a view to attracting in larger numbers a more highly qualified class of men to its ranks.

The increase in the clerical work of the Officers of the Forest Department, more especially with reference to the audit of the accounts, has already been brought to the notice of the Government of India, who are considering the best means of reducing the amount of work of this nature which Forest Officers are called on to perform.

17. In conclusion, I am to say that His Excellency in Council concurs in the Lieutenant-Governor's acknowledgment of the good service rendered by the Conservators and their Divisional Officers, who are to be congratulated on a successful year's work, and I am to convey the thanks of the Government of India to His Honour for the interest taken in the Forest Administration of the Province and for the exhaustive review of the work done during the past year.

Appendix showing the discrepancies noticed in the North-Western Provinces and Oudh Forest Administration Report for 1889-90.

CENTRAL CIRCLE REPORT.

APPENDIX D.

(Statement of free-grants.)

It is shown that in the Kumaun Division timber to the aggregate amount of 9,853 cubic feet was removed under "Concessions by grant of Local Government" and "Free-grants under executive orders," but Form No. 54 shows that "Free-grantees" removed from this Division a total amount of 10,253 cubic feet, or an excess of 400 cubic feet over the figures of the Appendix.

OUDH CIRCLE REPORT.

No. 55.

(Minor Forest Produce.)

The number of the bamboos (valued at Rs. 25) removed by purchasers from the Gorakhpur Division has been omitted.

No. 57 (B).

(Live and dead stock.)

The Grand Total of the column "No. on hand at commencement of the year" should be 62,480 and not 64,480.

SCHOOL CIRCLE REPORT.

No. 51.

(Fire-Protection.)

The fire-protected area of Dadi in the Jaunsar Division is put down at 1,730 acres, but the entire area of this Leased Forest is shown in Form No. 49 to be only 1,630 acres.

No. 53.

(Trees felled.)

As this Form has been cancelled by entries 19, 20, and 27 in *addenda* and *corrigenda* Sheet to Forest Code No. IX, dated August 1889, it should not have been appended to the Report.

No. 62.

(Financial Results.)

The Grand Total of "Charges" is entered as Rs. 2,70,104, whereas it should be Rs. 2,71,104.

[H.V.R.]

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